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      found in the IRF1 promoter (Rothman et al., Immunity 1:457-468
      (1994)), 18 nucleotides complementary to the SV40 early promoter,
      and a Xho I restriction site.

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<223> Synthetic sequence complementary to the SV40 promter; includes a
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<223> Synthetic promoter for use in biological assays; includes GAS
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<223> Synthetic primer complementary to human genomic EGR-1 promoter
      sequence (Sakamoto et al., Oncogene 6:867-871 (1991)); includes a
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17

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cattttatgt catgtatgaa agaagctgat gctttaaaac ataaaagtca agtaatcaat    600
gaaatgcaga aaaaagatca caagcaactc tggatgggat tgcaaaatga cagatttgac    660
cagttttggg ccatcaatcg gaaactcatg gaatatcctg cagaagaaaa tggatttcgt    720
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cgtcctgtgg ctgcagatgg acagttgcac acactaggag atctcctcaa agaagtttgt    840
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gagccaatgt tggaaacacc tctgcagtgg ctgagtgaac atctgagcta cccggataat    960
tttcttcata ttagtatcat cccacagcca acagattgaa ggatcaacta tttgcctgaa   1020
cagaatcatc cttaaatggg atttatcaga gcatgtcacc cttttgcttc aatcaggttt   1080
ggtggaggca acctgaccag aaacacttcg ctgctgcaag ccagacagga aaaagattcc   1140
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tttccttaac gaaaaaaaaa aaaaaaaaa                                      1529

<210> 14
<211> 2114
<212> DNA
<213> Homo sapiens

<400> 14
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gaagaaggtt cagagctgaa cggttttgaa ggaactgaca tgaaagacat gaggctcgaa    180
gctgaagcag ttgtaaatga tgttctcttt gctgttaaca acatgtttgt ctcgaaaagc    240
ctgcggtgtg cggatgatgt ggcctatatc aatgtggaaa caaaggaaag aaacagatat    300
tgcctagaac tcactgaagc agggctcaag gtggtaggct atgcttttga ccaggtagat    360
gatcatttac agactcccta ccatgaaaca gtctactcct tgttggatac actcagcccc    420
gcctaccgag aagcatttgg aaacgcactg cttcaaagac tggaagcttt gaaaagagat    480
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tcacttgctt ccaacttagg cttttggctc agaagattat tgaataatga tttgtcttag    660
tttctgtttc agtaagggaa ttctgaggcc gttgctatga taccatcatt aagacattca    720
catgtcttca tataatatct cttcatttca aatcctaatc actatttcat actattacag    780
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tactttctat gatgtagtgc tttggtattc ctacagcacc ccaccttccc caacagatgt   1440
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ttatatttta ttacaggtac tgatatttat aaatttaata aactgtacca tgctgctgca   1620
tgttttcaag tacatgttga acagtaagga ttggggagtt gtttttaat ggtcacctaa   1680
agcagctgct atagaaatgt tgaactaaaa ttttgcatct ggtcatacct tcatgcattt   1740
atcatttgca gatatttttc catcattatt aaaaaacagg aacttttagg ctctgaagat   1800
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ggaatgcttt gtttgatgat gtatgttcat tctcagcttt attttcagat gcttaactgg   1920
gcaatgaagt ctaacttcag gttgaacttt ctcatgttta atctcaggct aaatgtaaat   1980
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gatatttgta aagtttgaat aaaattctgt ttactcattt tgagttagta tgaaaaaaag     2040
tgattgtatg tttaagaatt gaaattgttc attttgtgat aaatgattaa ttccaaaaaa     2100
aaaaaaaaaa aaaa                                                        2114


<210> 15
<211> 2158
<212> DNA
<213> Homo sapiens

<400> 15
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gactgtaatc ccatggagct aagcagtatg tcaggatttg aagaaggttc agagctgaac      180
ggttttgaag gaactgacat gaaagacatg aggctcgaag ctgaagcagt tgtaaatgat      240
gttctctttg ctgttaacaa catgtttgtc tcgaaaagcc tgcggtgtgc ggatgatgtg      300
gcctatatca atgtggaaac aaaggaaaga aacagatatt gcctagaact cactgaagca      360
gggctcaagg tggtaggcta tgcttttgac caggtagatg atcatttaca gactccctac      420
catgaaacag tctactcctt gttggataca ctcagccccg cctaccgaga agcatttgga      480
aacgcactgc ttcaaagact ggaagctttg aaaagagatg gacagtcatg actacacttt      540
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atacactttg attcagcctg ctaaatcagg ggttcaatac tagcttggac aaactttgta      960
gtaattaatt gctaccagcc ttattggaaa caaattatca actagtttcc cctgcacaaa     1020
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gaattaatta tatattactt aactagtatt aaatgaaaaa cagggactga aatagttctg     1140
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gtacagtata tattcagaaa gtatttttgc ttcaacgttt actttctatg atgtagtgct     1440
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gaactaaaat tttgcatctg gtcatacctt catgcattta tcatttgcag atattttcc      1800
atcattatta aaaaacagga acttttaggc tctgaagatc atgtggacca gagcaaatta     1860
aagttcagtt tgtgtcacaa ttcattgcca gacttcattg gaatgctttg tttgatgatg     1920
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ttgaactttc tcatgtttaa tctcaggcta aatgtaaatg atatttgtaa agtttgaata     2040
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aaattgttca ttttgtgata aatgattaat ccaaaaaaa  aaaaaaaaaa aaactcga      2158


<210> 16
<211> 443
<212> DNA
<213> Homo sapiens

<400> 16
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gggctgaatg aggaacgcgc cactggacac atgaggaaga ggctgccctg ggagctactg      120
atgctgtgac ctcacctctc tggctttggg cggcaggtcc ctgcacctag gatgcctgcc      180
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agtgcacagg gagtgtgtgc agccttgtga agggctggga ccacttgccc agactggggc      300
ccctcaggca caggcgtggg gtcctactga cctgtctccc cagctcccac acagaaagca      360
tctaaaataa acacacgtgg atggaaagcg ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa      420
aaaaaaaaaa aaaaaaaaaa aaa                                              443
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19

<210> 17
<211> 1315
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> n equals a,t,g, or c

<400> 17
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agcctcctgc agctgggcct tgatgagcac aacagagtga aggtgtatcg cttctgaggc    180
cctgagcagg ggcttggggc agcccagcct ctcctccacc cagaccaagt gcctgaggag    240
ctgcctgcct tcttccatct gagaaagcac cctccttccc cctttgactt gcaggagcca    300
ccagggacca gggggttgag tggaacagta aagccacaca ttctgtgact atataaccta    360
tctcaggcta aaatgtgtgg acttgtacga gctcttgtca ttgacatggc aagctgatgg    420
cgtgcggtgg ctgcggggta tcagggccgg gagccctttg graggaaggg aaggcgttar    480
aggagctgcc ttcggaggct cagggagtcc ctttggagct ggttgtttcc ttggccctgc    540
agcgcactgc tcgggctcc caaggaggtt gtgtgtatgg ttcttaattc atcaggacaa     600
agaccccccag catgtgtgta ccctgggacc cgatttctct gggcccacat ctatctccaa    660
tacctcagcc tcagatcaga ccctttcttt tttgtctttc ttctcttaat ttttaaatgc    720
ctctttttctt gagcattcca tctctctttt tgaccctctc aggactgggc ttagctgtcc    780
agagccctgc cggarggtgc tggggggctgt ccctctgcag gcactgtgtt ttcctcaggg    840
gctgtcctca gaacacccct cctgctccct ggggctcctc agggagccat ttcagctgga    900
gtctcaggtc tcaaaaacaa cttctccagg aggccaaaaa aagactgggt tggcttctgg    960
tcctcatgat ggcttttatc ctcctgggac actttgggta tattcatggg cattgtttcc   1020
atctgtcttt tctacctgtg ccacccctgc cctgattcca cggctgcctc aggcaggcag   1080
gcaaggagct aggccggtgc cyggccctgg cagcaagggg tctttgtgca gttggagatg   1140
ctgccgttgt ggcagagcgt cctgcagccc cgcttccatc agcaggctct ggggtggggg   1200
ctttgcaggg gatgctctct gatgtttgtt ccgttgttta aataaaatgc acttattttt   1260
gttttttttt ttgcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagt         1315
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<210> 18
<211> 1174
<212> DNA
<213> Homo sapiens

<400> 18
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gggggttggaa aaaccacact aggcaaagaa cttgcgtcaa aatcaggact gaaatacatt    120
aatgtgggtg atttagctcg agaagtctga tcatcggata tcatggagtc tggcaagacg    180
gcttctccca agagcatgcc gaaagatgca cagatgatgg cacaaatcct gaaggatatg    240
gggattacag aatatgagcc aagagttata aatcagatgt tggagtttgc cttccgatat    300
gtgaccacaa ttctagatga tgcaaaaatt tattcaagcc atgctaagaa agctactgtt    360
gatgcagatg atgtgcgatt ggcaatccag tgccgcgctg atcagtcttt tacctctcct    420
cccccaagag attttttatt agatattgca aggcaaagaa atcaaacccc tttgccattg    480
atcaagccat attcaggtcc taggttgcca cctgatagat actgcttaac agctccaaac    540
tataggctga aatctttaca gaaaaaggca tcaacttctg cgggaagaat aacagtcccg    600
cggttaagtg ttggttcagt tactagcaga ccaagtactc ccacactagg cacaccaacc    660
ccacagacca tgtctgtttc aactaaagta gggactccca tgtccctcac aggtcaaagg    720
tttacagtac agatgcctac ttctcagtct ccagctgtaa aagcttcaat tcctgcaacc    780
tcagcagttc agaatgttct gattaatcca tcattaatcg ggtccaaaaa cattcttatt    840
accactaata tgatgtcatc acaaatact gccaatgaat catcaaatgc attgaaaaga    900
aaacgtgaag atgatgatga tgacgatgat gatgatgatg actatgataa tctgtaatct    960
agccttgctg aatgtaacat gtatacttgg tcttgaattc attgtactga tattaaacat   1020
gcatgctgga tgttttcaag ttgtgtttta gaaactaat aataatgagt aaacacagtt   1080
accatacttt tcaattgaaa tgaaggtttt tcatcagcct taaaagtgta agaaaaataa   1140
agttgtcatt cattcgaaaa aaaaaaaaaa aaaa                                1174
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20

<210> 19
<211> 916
<212> DNA
<213> Homo sapiens

<400> 19

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caatttgagt ttcagtattt ttttctccct aggcatgtgc ttcaatttca aatatttttt     120
tctgtgtgga aaatgccatg taactattgc actaccttct gtgtggactg tgttggtatt     180
ggttctttct gtatatcaaa agtcagggtg tttataactg caaagtttgt ataagtggct     240
ttattcctct tctagaagat ttatgaggag cctaggaagc actattggta caggaggaaa     300
aaagaatgga aaacatgttt acagactcta gctttcctta ttagcttaaa ctggggccct     360
caaagagcag cctgttgatc ttttggccaa atgacttgag cataagtctt ttatttcttt     420
ttaaggttaa atcgtaaact gtataccttt actactgaaa acaaaactat agggcatcat     480
actaattgaa aatcaatagt aatgggttcc atccattagc tttttaaatg aatagatctg     540
gtattgattt ccttcctgtt tttttgaggc acattccttt acaaccagtg tttaaaccac     600
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ataaagcaaa tcctctgctt caaaggtttt tgaaataatt ggatcccttt ttgaaaagga     720
agatgagttt aactgtgtcc aggtggagta atagtactgc tgttgcatga atagatgata     780
caaagcaagt gatgaggttg gtatgacttc tttagtgacc ttttagggtt tgcttttatt     840
ttcctctctt ttttgtatta tttctttcaa acatagtaaa tatatgattt tacagccaaa     900
aaaaaaaaaa aaaaaa                                                      916
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<210> 20
<211> 1228
<212> DNA
<213> Homo sapiens

<400> 20

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cagcccagag ccgggggctat ggggcccagc gggcacctgg tggcctgagt tatcctgcag     180
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gacctcctgg ggctgcaagc gagctcagcc ctggcctggc tgaccctgga ggtgctggcc     600
atcctgctca gcctctatct ggtcactgtc aacaccgacc tcaccaccat cgacctggtg     660
gccttcttgg gctacaaata tgtcgggatg attggcgggg tcctcatggg cctgctcttc     720
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ccaacccaag gtgctgagag atctccagct gcacaggcca ccgccccagg gcgtggccgc    1140
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aaaaaaaaaa aaaaaaaaaa aaaaaaaa                                       1228
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<210> 21
<211> 1960
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

21

<220>
<221> SITE
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (25)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1094)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1952)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1956)
<223> n equals a,t,g, or c

<400> 21
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agtgttttgt ttttaattta aatctgtcct catgcaaccc tccatgaggg gcagcgagcg   180
gcagggagca gactggcttt gtaggttcag cactcggccc cccactgcgg gagaggcgga   240
acccacttgc atgtcagcgt ttttgattcg agaaaagaaa tactctcaac gttttaccaa   300
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cgaggcattt taanactgcg cttcaggaaa tctcaagttc catcttgtgt tagtaacgta  1140
cccacatttt gctggagtta gtttattaaa gatgcctamg gtgaactctc tggcgcaggt  1200
taaatgcagt tttgaaaacc caggaccctg gctcgtgagt gcgtctgggt caggaagaga  1260
cctctctgtg cgtctcaggc tgagatgcag atttctgttt tctaaaactg gaagcgacct  1320
tgacgtgtat tgaaggtgtg tgtgcccmac cccacccagc acgcactcat tcagtccatt  1380
gccttaacac aagcctgatg gggctgtttt ctcacaatat aaacgaataa agtgtcttct  1440
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gaaatgttct gggttcaggc gcccctccca gggctgagaa agcgcagcca gggacagctt    1620
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agcttctggg gagggaactt ctcccggcag aggggacact ccgccttgct gctgcaccac    1860
gcggtgatgc actcccagca gaacaggtgg ccgcagggcg tggctgttgg gtgcctgcgc    1920
tcctccaggc acagggtgca cagggtgtcc ancgtnccgc                         1960


<210> 22
<211> 1425
<212> DNA
<213> Homo sapiens


<400> 22
gaattcggca cgagtttttag tagagacagg gtttcaccat cttggccagg ctggtcttga    60
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gagccactgt ggccagccta acttatcatt ttcttaaatg tgacttaaat gcagttgaaa    180
acttgtatta tgactgagtc gttttatccc ctgaatcaga gaaagcaaaa tgaaaatccc    240
tctgctgtgc taatgcacct ctttcttttt tcagtgacca tgcagcaggt ggccaggaca    300
gtggctaaag tggagctctc agaccacgtg tgtgatgtgg tgtttgcact ctttgactgt    360
gatggcaatg gcgaactgag caataaggaa tttgtttcca tcatgaagca acggctgatg    420
agaggcctgg aaaagcccaa agacatgggt ttcactcgcc tcatgcaggc catgtggaaa    480
tgtgcacagg aaactgcctg ggacttcgct ttacccaaac agtaacccca cactgcaaga    540
ggggacccct ccaccccag taccctggac ccccctccgca gagtctcggc agagccctt    600
gtgctgctgc ttctggaagt agtcyccctt cctcccggga tgacctcagg actctgtcgg    660
tttcccctct ttaccctttcc ccgtccccgt gttctgctgg gctctgattc tgcccaatga    720
gtatccccat aggttctcaa aaacatgaac aagtctgtaa agctcagaca tttgtcagcc    780
tcaacagcac cacccattca agcatcctgt ggataaagaa ttcagggaac catccacaca    840
cctgccaacc ctgggaagca tccagttctc aaatcgtttt tgctatggat ttatactaac    900
aagaacattc cttgacttcc ctcctgctgg tgtttttaaag ccacaagtag ggaagatatc    960
tggcaggcag aaagaagtct gtgatgataa acaatgatga ggatgaccta ggcaccctac    1020
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ggcctgctct aggaaggcag catgctcagt gggaacacag caagattcag aatttaaagt    1140
agttgcttca tggctctgtg cactcccttt tcttcctcgc agcctcccta agatgactcc    1200
agtgtgaccc tgtgcttagt gagcaatagt gattgagctc atgttccctg caagtgccat    1260
ttcctctcca ggatgggcct ctaaagctga ggcctggctc agagcctgtt tgccctctgt    1320
cttaaacaat tgtaaatatc acttaaatta taaccatttg caataaacat ccccaaagtt    1380
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa waaaaaaaaa aaaaa                    1425


<210> 23
<211> 951
<212> DNA
<213> Homo sapiens


<400> 23
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agaggttttt ctgtggttgt aaatggtcct attttcacccc cttcttcctg tcacatgacc    180
cccccccatg ttttattaaa gggggtgctg gtggtgagcc gtgtgtgcgt gtccctgctc    240
tgctgcccgc ctggctgctc tgtctgctgc cccctccccc caggtgggtc cccctgcttt    300
tcacctatct actcctgagc ttccccaaca ggagcaggtt tgaggggcca ggcctcttgg    360
aggcccctcc tgcttcgttg ggttctgctt ccttcccttc ttagctggct caggggcttc    420
tatgggatcc tggaagttcc ttagggactt gcccagggtc ccagggccac ccacacttca    480
tctgctccct cataggcccc acctccacgt cccggctggg ccccagaccc cagcttcctg    540
ccctccaccg ggagtctgca tggttgggag tcctgggtgg aggggccttt gtgaggctgg    600
acccggctca gggcaggtgg aggagctggg cctcccacag ggtgcccggg cagtgccatc    660
ctggtggggg agggcagcct tcaaacgtgt ggggtctaca gtcctcaggt ctaggcaggg    720
ctgccggttc tccacctccc catccgcccc aggcccctg cctgtgcctg ccttgcaccc    780
cctctgcttg ggccacggtg tctctgcatt gcctgccttt ttgccttcac ctcttttctt    840
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cccgccccc  tgcacattcg  gggtctcagc  ccccaggctg  tgagctcctt  gggggcaggc       900
cctcaataaa  tgtgaactgc  tgctgccgca  aaaaaaaaaa  aaaaaaaaa  a                 951


<210> 24
<211> 229
<212> DNA
<213> Homo sapiens

<400> 24
ggcttgttgt  ggggcaccag  cagagggcaa  agtcatactc  ctgcactgac  agtgttcgtg        60
aagagaatga  aatatgaaga  aagctatgaa  tagttggaaa  ttcggggggc  tgtgcttact       120
cctgattatt  tcagtttggc  taaaacagag  ctggcatcaa  ggaagggttt  gttgtgatga       180
ttccagagag  ggtgactctc  agggagttgc  ccaccaggcc  cacgaagcc                   229


<210> 25
<211> 508
<212> DNA
<213> Homo sapiens

<400> 25
ggcttgccac  caacgtgttc  atcctgagac  tgtgcatgat  taaggttatt  ctccctctct        60
cgcctctcgc  caagtttatg  cactcttccc  ctgtggacca  tctctttcga  caaatccagc       120
aaaaccccac  ccccatcctg  gaaaatttct  tcttcaatcg  gggttaagtc  ggggatctag       180
agaggtcggg  tgtgaaagga  aaggaccttc  gggcgggaac  caataccaag  ctaccctcct       240
ggttttcgtt  gtttatatac  atgggagggg  gaaaatggtc  tgtattttta  aaacagaaga       300
tgtcctgccg  tttctgcttc  tgttttttcct tttttctttt tttttttttt  aacagccaat       360
tcttttgaag  ggagatagcc  agccaatttt  ccatttctcc  ttgcctacgg  agctcatgca       420
aacttcccta  cgctagccgg  ctggccctgt  gcaaccttca  ctaccacctc  ccgccaaccc       480
cctcctctac  tccttcctcc  ctaagccg                                            508


<210> 26
<211> 1099
<212> DNA
<213> Homo sapiens

<400> 26
ctctataggt  taaagttggt  acgcctgcag  gtaccggtcc  ggaattcccg  ggtcgaccca        60
cgcgtccgaa  atgcttcagt  ccgccgagag  cagtaccgtg  tggccaagag  gtggactcag       120
agccttcctt  gagctaaact  cggccaacca  aggcacgcag  catgtcccct  caggtctcca       180
gtcagtccag  gttgaccctc  agttctggac  gtgtgtatat  agctgtattt  aatacctcaa       240
ggtcattgtg  gctctgggga  tgccggggca  ggaggacgag  ggtgcgctgt  ggacacagca       300
gtccgcggaa  ttccgttctg  ggaagccaat  ggtcgccggc  accccttgct  tcctccctct       360
gttgtctgcc  tgtgtgacac  acatcaatgg  caataacttc  ttccaactcc  tcgcagaagt       420
gggagaggcc  ggcagcctgc  accgagaggg  gctttcctct  ctcttgctcc  ccgcttcgtt       480
ctgttttggc  tgcagagagt  ggttcatcca  tactctcatt  ccctcgcctc  cccttgtgga       540
cgggggtctt  gccttttcaa  ttcctgtgtt  ttggtgtctt  cccttatctg  ctaccctgaa       600
tcacctgtcc  tggtcttgct  gtgtgatggg  aacatgcttg  taaactgcgt  aacaaatcta       660
ctttgtgtat  gtgtctgttt  atgggggtgg  tttattattt  ttgctggtcc  ctagaccact       720
ttgtatgacc  gtttgcagtc  tgagcaggcc  aggggctgac  agctaatgtc  aggaccctca       780
gcggtggagc  ctgctggggg  gacccagctg  ctcttggaca  agtggctgag  ctcctatctg       840
gcctcctctt  tttttttttt  tcaagtaatt  tgtgtgtatt  tctaactgat  tgtattgaaa       900
aaattcctag  tatttcagta  aaaatgcctg  ttgtgagatg  aacctcctgt  aacttctatc       960
tgttcttttt  tgaggctcag  ggagaaacta  gcattttttt  ttttccaaac  tactttttgt      1020
cactgtgaca  gttgtaaata  aagtttgaaa  atgctttcca  aaaaaaaaaa  aaaaaaaaaa      1080
aaaaaaaaaa  aaaaaaaaa                                                      1099


<210> 27
<211> 990
<212> DNA
<213> Homo sapiens
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<220>
<221> SITE
<222> (948)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (954)
<223> n equals a,t,g, or c

<400> 27
ctccaaccct gtggctgccc ttcacactta caggcctaac cccagcagga cctgccagct      60
gcttcatgaa caagtccctg cctcatgtta attgcaagca ctcatttcac tctccctgtg     120
tgccaggcaa tagcataagc actggaagaa tacagatgtt atagtgagtc ctacaatagc     180
cctggaaggc aagagctgtt tccttkccat ttctacaatg agtcaattgc agatgatgct     240
ataacacttc cagtgtttct gacacttccc tgaagctata cctgctacct tcatgggccg     300
agcttgccct tatgaggccc acaggtggca gtgggcagag gggaccccgc tataccacct     360
cgctgctgtt ccactgtctg ctcccgtgtt ctgaccacag ctctggtgcc gtttctcaag     420
cctgggcttc attcaacatt ttctatctag ctcttcatgg tgctgctcct gctatggttc     480
cacagggctt cttctcgcag gtcagctcct tagagaggtc tcccagattc cccgtaaagc     540
agccctgcag cctctgcctc tctcagccgc atcaccctgt tgcttccttc acagcatgtc     600
tcaccatctg caaccatctt tctgtttgtc gtcttgttga tttgctgcct ccacactgtc     660
agctccttgg gaacagagat tggtttgttt actgtgcatc cctggtgccc agaacagggc     720
atggcatatt gttggtgcat aataaatatt gtggaaataa aaaaaaaaa aaaaaactcg     780
aggggggcc cggtacccaa ttcgccctat agtgagtcgt attacaattc actggccgtc     840
gttttacaac gtcgtgactg ggaaaaccct ggcgttaccc aacttaatcg ccttgcagca     900
catcccctt tcgccagctg gcgtaatagc gaagaggccc gcaccgancg cccntcccaa     960
cagttgcgca cctgaatggc gaatggcaaa                                      990

<210> 28
<211> 3152
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (361)
<223> n equals a,t,g, or c

<400> 28
ggcacgagcc cggcttctcc tgtctgacat gtggtccagc aaggaactgc agggtgtcct      60
cagacagcaa ggtttcgata ggaacatgct gggaacctta gctggggcca acagcctcag     120
gaacttcacc tcccgattct aagaagagac tgtccaagca agttaggctt gcaggaagat     180
atgacccagc tgagaagccc tcaggcctcg ctggatgggg ttttctgtcc atcctgtgca     240
gtatttggga aagttcacaa gaaactgaga agaaacctaa aaactgtgga tagtggaaag     300
atttttagat tttttttttc cttggggaaa ctggcaggca atggggggtta gggaggttgg     360
ngcsggggg gctttcttga gttaaagggc ttatatgtga tgtcaatatt tcttcctctg     420
agaaatggta tatatatgtg tctaatgtaa gtgtgtgcat gcatgtgcgc gtgcatgtgt     480
gtgtgtgtga gtgtcttaaa gcataaccac aaactgcaaa aagctaggta agctattttg     540
ttgcagctca taaggtggtg aaaaggactc tcctgtgttt cttactcata ggcaaggaca     600
acatgtgctt tttggtgagc tgctcataat tcctgaaatg tgtggtgcca gggcaagggg     660
gccatcactg cagtcaggcc ctcagaggag tcctgcaggc ttcctaccag tggtctccaa     720
gggtgcagga gtaactgggg ctgggccagc ctcccccctt acaaggctgc tttccaggaa     780
gggaggtctg gtgtatctca tgggagaatc tggggtgtct gtagtgtcac ccctccagca     840
gcgccacaag gactgaggtt gggtaggtgt grggttccag aggacagcag gacactctcg     900
catactttgc caaatgaggc ctgctcagag gagtaggagc tgaaagatgg tgccttccac     960
cctcttgggc tgtgtgccca tcagagcagg ctcagcctgc aaagkccctg cattcagagg    1020
tcttgtaatc tacttgttgc aggagaaaga aggtaaaaaa tgatcttttt aagaaaagct    1080
attttattgc agctctttcc caagagctgt tctgggaatg gctggtcttc atattcccag    1140
tggagagggg aacaagtggg gctgggcata tacctattcc ggcttctagt gggatggagt    1200
tggggtatag aaattaacca ggaagatgtt tccaccaagc ctgctgtgag tcaattgagg    1260
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gagtgtttgg ggtcccagga gacttggacg gggggagttt gggtagacta ggaaaggaaa   1320
gtgccatatc agggtaccgg taccggcaag ctcacatctc agccaggggc catgccccac   1380
ttcccctgac cccagctgtc ttgtctccac tctgtgaaac ccacagggga tgtgataaac   1440
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gcagcaggag ggctcccgag ggccttatga gaaaacctgt gtggacatcc cttggtgtac   1560
actaagacag agcagagccc agcgctccca agccttcctc cttccagctt ctacctccat   1620
gctagcattg ctggtgttag agaggaatta acttcctggt ctgtgccctt ctctagaaga   1680
atataagatg ctcctcctcc tcacccttc tcagcctcct cccaagtctt cctcttctgc    1740
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ggactcagta tgacaactga gatggggga gccagacatg tgaggacgct gtcctccgag    1860
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tgcttctgtt cacactggga ggcccactcc tggctcacct ctccctctca gggacccacg   1980
tgggagcctg gatccctgga ctgtcctggg cataggtttc aggggcctcc tttgttgtca   2040
tcagaaccca gaggaattct tctcctaaaa aatacgtatg gcataccaat ctgtgcgggg   2100
cagtgtccta agcacttaga ctacatcagg gaagaacaca gaccacatcc ctgtcctcat   2160
gcggcttatg ttttctggag gaaagtggag acacaagtcc ttggctttag ggctccccg    2220
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taccagccca ggcggatgcc ccttcccctt agcactaccc tggcctcctg catccctcg    2340
cctcatgttc ctcccacctt caaagaatga agagccccat gggcccagcc cctgccctgg   2400
gaaccaggca gccttccaga cctcaggggc tgaggcagac tattagggca gggctgactt   2460
tggtgacact gcccattccc tctcaggcca gctcaggtca cccgggcctc tgacccaggc   2520
ctgtcacttt gagagggca aaactgagag gggctttcc tagagaaaga gaacaaggag     2580
cttgccaggc ttcatgtagc cgacacacgt ctcaggattt taagtccaca ttggcctcac   2640
actaccaggg ccaatgccca aaataaggag ttccaatttg gggccaaatg aggaaggaca   2700
cagactctgc cctgggatct cctgtgctag cggccaatga caaatccagt cattggccac   2760
cagccacctc tgcagtgggg accacactag cagccctgac tccacactcc tcctggggac   2820
ccaagaggca gtgttgctgt ctgcrtgtcc accttggaat ctggctgaac tggctggsag   2880
gaccaagact gcggctgggg tgggcaggga agggaagccg ggggctgctg tgagggatct   2940
tggagcttcc ctgtagccca ccttcccctt gcttcatgtt tgtagaggaa ccttgtgccg   3000
gccaggccca gtttccttgt gtgatacact aatgtatttg cttttttttgg aaatagagaa   3060
aatcaataaa ttgctagtgt ttctttgaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa      3120
aaaaaaaaa aaaaaaaaa aaaaactcg ag                                    3152
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<210> 29
<211> 1402
<212> DNA
<213> Homo sapiens

<400> 29
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ggcacgagtc accctcttct ttcgtcaccc gtccccgacc ccacccgagc ccggcgcctc     60
agctgccccc ggccatggcg tgcggaccac tctgaaaagg actctggatt tcgacccgct    120
gttgagcccg gcgtccccga agcgcaggcg atgtgcgcca ttgtcggcgc ccacctcggc    180
cgctgcctcc ccgttgtcgg cggccgcggc caccgccgcc tccttctccg ctgcggccgc    240
ctcgccgcag aagtatctcc gaatggagcc atcccccttc ggcgacgtct cctcccgcct    300
caccacagaa caaattctgt acaacataaa acaagagtat aaacgaatgc agaagagaag    360
acatttagaa acgagtttcc aacagacaga tccgtgttgt acttctgatg cacagccaca    420
tgcatttctc ctcagtggac cagcttcacc agggacttca tctgcagcat cctcaccatt    480
aaaaaaagaa cagcccttat ttactctacg gcaggttggg atgatctgtg aacgtttgtt    540
gaaagaacgt gaagagaaag ttcgagaaga atatgaagaa atattgaaca caaaacttgc    600
agaacaatat gatgcgtttg tgaagtttac gcatgatcaa ataatgcgac gatatggaga    660
acagcctgct agctatgttt catgaatcac gtatcctgca tttgtgggct gccttgttcc    720
ttgttgagtt gttgcaagag gtcccaatta tgacatgcag caatgccaat accccttctg    780
tgaatacagg ttatttcaag ctttcgtcag tggcaaccac tcttaggcag cagcaactgg    840
ttttggaaat ttccctgatg tcagtaccac ctggatgtgg acctttgcta cctgtattaa    900
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aggattaaag ctggtattct agaacatgcc cttcactggt tgtgtaaata aaactgtaga   1020
atgacacttc agatgaagtt agtgtgattt taattgtgca ctacaaccga gctgtaacca   1080
gttactaatt ttagaatgta atcccaggac aatattaagc aaatagcctg cagtgcttcc   1140
tgtgaaatag tgaaggagga gggcatttct gtattccagg acttcttggg gtttcagaat   1200
gggtttgtat gattttttt ttttttgta gttttattta ttctatcagt cttttaaca     1260
aatgtttatt gctgcatttt tttttttcc agtgtatcat tgtttactg cccttgtagt     1320
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26

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actggaattt agttggaaga ataaaacatt tacttctaaa aaaaaaaaaa aaaaaaaaaa    1380
aaaaaaaaaa aaaaaaaaaa aa                                             1402


<210> 30
<211> 841
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (45)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (84)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (762)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (767)
<223> n equals a,t,g, or c

<220>
<221> SITE            .
<222> (782)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (789)
<223> n equals a,t,g, or c

<400> 30
attttttggga atttggcggt tanatttacc cggaacggtt ttccnttgtt ccgcaagtcg      60
aattacctnc ctaagggaac aaangtggag ttcaccgggt tgcggccggt tttaaactag     120
tggaccccccg gggctgcagg aattcggcac gagatcctga cccaagctca ggcacaccca     180
aggcacctgc ctctctgagt cttgggtctc agttcctaat atcccgctcc ttgctgagac     240
catctcctgg ggcagggtcc ttttcttccc aggtcctcag cgctgcctct gctggtgcct     300
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cccagggctg ggtgcccacc atgcccettc ctctttctcc tcctacctct gccctgtgag     420
cccatccata aggctctcag atgggacatt gtgggaaagg ctttggccat ggtctggggg     480
cagagaacaa ggggggagac acaagtagac ctcaggtaga acgacactgg gcggagccac     540
cccagggcct gctcccaggg agtgctcgag gcgcatcagg cccgtttttt accagtttat     600
atcacggtct tcatttttaa aagtaacgct aactttgtag ggacgatgtc tcatggatta     660
aataatattc tttatggcag taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaact     720
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27

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cgagggggggg cccggtaccc aatkcgccct rkagkgmktc gnattanaat tcactggccg    780
tngtttttana aattcgtgaa tggggaaaac cctggggtta cccaacttaa acgccttgca    840
g                                                                    841


<210> 31
<211> 966
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (130)
<223> n equals a,t,g, or c

<400> 31
gcgaatgact tttttaagct ctttaagggt taagtatatt agccatttgt gctatgaatc     60
acaaatattt ttctccaacc tcgttttctt tttcttttt tgccatggga gtattttta    120
tattacgtan tttaacctct cagtgctttc tttcatggtt tctggggttt gtatccgcag    180
aaagttttga gcagtggtcc atatctggga gttagaaaga gcccaagagt gctgatatga    240
ggcagaccaa tggagtgaga cgagtctggg ggaccccggg ttctagttca agtagttcag    300
acaccagtgt gaagacagtg aatcatggat ctgagcagtg attaaaaaag cctaacctct    360
ggtggggggg agtgggtggt ggccaggaga gaagaggagt cacctctggg tgccaagaat    420
gctggaggca gggtccggcc tctgcactca ggcccctcgc tccctgcccc tgcccaatcc    480
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acagcatgga tcggtgaaac caggtggctt cttgccccct tctccgtggg aaccccaggc    600
ctcttgcctc cctccccacc tacaaggccc tctcccaagg gatcgcaggg cctaggtgcc    660
tggacccagg gtgtgccagc ccgtctctgt gcagtccctg gaaggggcgc tgagaaaggc    720
accagctcct tggaccccac ctcccatgct ctcactctca tccccgttct cttgtccaca    780
cagctcttcc aataaaggtg tttctcttcc tccttctcct ccttcactgc cgcctttgtc    840
atctcctttg gagggtgcat gggggacggg aggaggggca cgggtttaag ggacttgggg    900
agccactgga agaataataa aagtgttgct ctttatcatc taaaaaaaaa aaaaaaaaac    960
tcgaag                                                               966


<210> 32
<211> 1005
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (883)
<223> n equals a,t,g, or c

<400> 32
gagtgccttt accttggtgc taagagtccc tccagattag tggctttccc gtgccctttc     60
tcttctctgg gctgctaatg ccttccttcc ccttattagt aatattactg ataaacaaat    120
tgtacattct ctgatctcay ttcagaggct gtttctgtgc actgaagatg tacacacagt    180
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ggtactggat acattaaaca cacacacaca cacacacaca cacacacaca catatggcat    780
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ctctgtgtga gtgactctgt gtgtatgtgt gttggtggag gtncagggat gacttgtttg    900
taatatacct taaggaagtc tgtccgaatt tgcccttcaa atactaaata aattcatctc    960
tcacctcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa ctcga                    1005
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28

<210> 33
<211> 464
<212> DNA
<213> Homo sapiens

<400> 33
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gaccctgggc tgccagatgc aggaagcatc aaacccccca gcctcgtggg tgcggggcag      180
ggcgcaggca gcacagctta gatgccctgg tttgtccctc ttgtctcctg ggaagagctt      240
gctcccgccc agctctcctg ccactggcct ttcagggttg ggctgggccc agagtgcctt      300
ttagtcgctt ctcacggtgg cctgatggct caacccagtc ccaaacgggc ccagtgacac      360
tgccgactgc accccagctc aggcccccac tgcaccagca atgctagaaa accaagccaa      420
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<210> 34
<211> 839
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (823)
<223> n equals a,t,g, or c

<400> 34
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ttctttgctg ggcttcttgc ttgacacagt tttctgaaac atggctctgg caggcttttt      180
tcttccatgg acacattgct gccgtttatc actgaagttc ctctgtggag ttaccaggag      240
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gctttaaaac ttttaaaagg ggaatggatt cccagtttaa aaataagcma aagaaaggat      360
aaacatgatt tcattgatgg tgtgcaactg ctttagaaca tcagatattt tgtgatgtga      420
aatgggatga tactctattt tacaaaatgt gtactgctta tagaaaatgt atttactgta      480
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gcagaagccc ttttgccttc tctctcttta aaactagatc catagaaatt atttttatta      720
cagtaatagg gcaagatagt tttatgtcat atataaactg gaattatgta gtgttagtag      780
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<210> 35
<211> 1102
<212> DNA
<213> Homo sapiens

<400> 35
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tgcgatgaga gctcaagata tgctcatcgt tttacttatt aatttgtcct ctgaaccatc      180
gtgttaggat tttaaaaagg agcatttgtt ctcatgtgga ggctttagtt tcatgccgcg      240
acctctgagc tggcatgggt gtgagttagg ggcagacggt gtggagggcg ttccctctca      300
ccatttctta tgtgttctgt gcgcagctct tgtcctcaaa cgatgccacg acaacgacac      360
ccagcctgca gcctgggaaa ctgatactct tgaggtcaaa ggacttcctc aaggccaagc      420
atctgggatg tgggagagct gaacgtaaaa gcattctgtt gggcactttg gccaagccat      480
ttccattgca cggtgtggtt ctcaagtcca cagcttagcg ggggcctatt ctgaatactg      540
gcacaggttc gaaaaatttc attcgtatgc atgtgtatat gtatacacag agacacataa      600
aaatacacat ataaattata tatattcata tatatatata tacacaccta cacatatata      660
tacaatgtgt atgtacaccg atatgtattt gtgtgtctgt gcccctgtat ttttattcaa      720
ttattttact ttattttag ctctttaatg tgtattcatt tttttaaaag tacaggaaat      780
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ggccagacgt ggtggctcac gcctgtaatc ccagcacttt gggaggccga ggtgggcaga      840
tcacaaggtc aagagatcga gtgagaccat cctggctaac acagtgaaac cctgtctcta      900
ctaaaaaaat acaaaaaaat tagccaggca tggtggcggg cgcatgtaat cccagctact      960
cgggaggctg atgcaggaga atggtgtgaa cccgggaagt ggagcttgca gtgagctgag     1020
accgcaccac tgcactccag cctgggtgac agagcgagac tccgtctcaa aaaaaaaaa      1080
aaaaaaaaaa aaaaaaaaaa aa                                            1102
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<210>  36
<211>  1112
<212>  DNA
<213>  Homo sapiens
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<400>  36
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ggctgaggga ggaggacagc tcaaactctt tgcctcaagc aatcctccca ccttggcctc      180
ttaaaatgct gggattatag gcatgagcca ccacacctgg ctatgatggt taattttata      240
tgtcaacctg actgggtcat agggtaacca catatttggt cttactctgg gtgtatctat      300
caggatattt ctgggcctca ttcaacccat tgaaggcctg tacagaacag gaaggctgat      360
taagagagaa tctctgtctt tgaggtggaa aatcagtctt ctgccttgtr aacgtggact      420
cagactggaa ctcataccgt cagctctctt ggttttcagg cctttggaat tggcctggaa      480
ctataccatt ggctcttctg ggtcctcagc ttatcacctg cagatcttgg gacttctcag      540
cctccagaac catagaagcc aattccatat agtaaagctc tgtctctcat ctatatatct      600
tatcggttct gttyctctgg agaacagact aatgcatcca tattgacagg aaaatagttc      660
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gtgagtattt tgtatgttta cttgggccta tgtgttagtt tctccaaagg aggaaatatc      840
actggtattt agctttacca gttgttaagt tgctttttccg aagtggttat gtgaatttca      900
ctttcaccag catttcccta ttctgttggt gttgagtggt tctattaatt ttaatttaca      960
tatcattgat atctgataag gttgaggact tttttttatt gatttattgg ccattagtat     1020
gtttaccctc tgggattttc ctatttatat ccttccctcc atctcaaaaa aaaaaaaaa      1080
aaaaaaaaaa aaaaaaaaaa aagggcggcc gc                                 1112
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<210>  37
<211>  2531
<212>  DNA
<213>  Homo sapiens
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<400>  37
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acagtaaagt ccccaacctc aggtagttta taatgaagtg gaggagacaa gatgcataaa      120
gaagtgacta ttaatagtaa ttttaaaaca gctattacaa atcagcataa aattatatgc      180
catgcagtta acgaatgtcc tgaattaaaa agagtgtctc tactgctgga ggcttcaata      240
attaaacaaa ataatgtatg ttaatttgaa cacagtgcat gatgcgttat tatatttact      300
tctattatta ttaattatgg ataagatgtg gatgggtgca gagagagagt aggaagaggt      360
acctcgtata tagaatctgg aaaaaaaagg tagaattgtg gacgacagta ggggtggcca      420
gaatatagtt tgtatagcat agtgatagga gataagatta gactggtaga ttgtagcttt      480
atcttagaag gctttgtatg tcatgctgaa atataactga gccttccaca ggctaaatgg      540
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ctatatattt ttgtttcatc tataattcct agcattgctt ggtcataatt ttttttctta     1020
gaaccgtgat tatatacatt attaattagt tttaaaaatc aaatccgcaa gggtaattta     1080
atcccagaat gaaaatgacc tctatataag tatttcaaaa atcatttatt tgtaatgagt     1140
aaaaatgttg aaaataaggc ttactttat tatttgaata tggtaattat gtaattatcc     1200
ttttaatatg ttaaggttat attctgtgcc ttagagtatg ctaagcactt tatacataat     1260
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30

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gcctttactg ataattgtgt tcaatattcc catgagggag gcagtctttg actttttatt    1500
tatgataaag attattaaag tgcttaaagt ttttttattgt atagcgtgtt ttatcatcaa    1560
acaggtttta gttttttaag ttaaactgat caaaaataat aaaagctgat ggctctatga    1620
cacttgcatt tgagagaaca agaatagga gcaatatttc aagaaaatca ttcttactgt    1680
ttttcaaaac tgtttagtgt cagagatgcc ccaagaccac tcctaggttt attgtttcga    1740
tagaaggact tacaggatta gtatatagtt gcactcctga ctaagattta ttatagcaaa    1800
agaatacaca gcaagattag caaaggaaaa aggtgcatgg gaccaagtct ggaggaaatg    1860
agtctcgaac tcctgacctc aggtgatctg ccagccttgg cctcccaaag tgctgggatt    1920
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ttacttgaaa gaaataacca ctgctatagt attatatcat accaaagcat atattttata    2040
atttgggcta cctagaatta ttattttttt tttggaaatg atgttatatg tagttataaa    2100
tcacaaatga cttggtaata aaggccatat gatcttcaaa accaaactgg aactagcata    2160
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ggctcacacc tgtaatccca gtgctttcgg aaactgaagt gggatgattg cttgaggcca    2460
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aaagggcggc c                                                       2531

<210> 38
<211> 954
<212> DNA
<213> Homo sapiens

<400> 38
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cattatgaag gttttctctt ttaatcttga aaggaaaaaa atccgtctct aaaaaagcaa     180
tcacaaagaa gaggaaaact gtcataaagt cacctactgt accagagttt caggtaaatg     240
tttcaacttt gtctcgaaat ttttcaattt tttgtttcag tgttcatatc attcctcgag     300
agtttggctg aattccaaga aactgtagca cacttacttg taatgaaatg tttctgacag     360
tgacttttct ccctgcaagt gcagatgtaa ccaagattta atctgctagt atttcgtaat     420
ttttacctct attttttgtct tttaataata aaaccctttt tttatatctt aatctctact     480
agtacatttc ctagaagcag tttaatagaa atagtatata tatactatat agtatatgtg     540
tgtgtgtgtg tatgtatata tatataatac ataaaagcaa atgtgtgaat gaaactcttc     600
caagaacaaa tcataatttg gagatggtaa tagtgcctag atagttcgtt ttcatttatt     660
tgggcactgt agaaataaat ggtagattta ttaacttgga aaacaaatct ttcaactctt     720
agctgtatat gatcttcaga gagaatatta agtaaaggtt aattgaaatg gtctttaaac     780
atttctgtgg aaagaaaaag taattatctg tactgccata tgattaagtg aagagttttt     840
tatttgtagc taatactaag cagagaatct caccctaatt aatgctttta ttttctattt     900
tataaaagat gtattttctt caataaacac tttctttaaa aaaaaaaaa aaaa          954

<210> 39
<211> 3342
<212> DNA
<213> Homo sapiens

<400> 39
ccacgcgtcc gctgaaccgg accttccccg acaacgtgaa gttccggaag accacggacc      60
cctgcttaca gaggaccctg tacaatgtgc tgctggcata tgggcaccat aaccagggag     120
tgggctactg ccagggaatg aatttttatag caggatatct gattcttata acaaataatg     180
aagaagaatc tttttggctg ttagatgctc ttgttggaag aatactacca gattactaca     240
gcccggccat gctgggcctg aagaccgacc aggaggtcct cggggagctg gtgcgggcga     300
agctgccggc tgtgggggcc ctgatggagc gtctcggtgt gctgtggacg ctgctggtgt     360
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gggactgttt gtttaacgaa ggctcgaaga ttatcttccg ggtggccctg accttaatta     480
agcagcacca ggagttgatt ttggaagcca ccagcgttcc agacatttgc gataagtttta     540
agcagataac caaagggagt ttcgtgatgg agtgtcacac gtttatgcag gtgtgtgggg     600
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                                      31

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ctgcacgtgg ctcagtcccc tcccagggggg ccccgcctca cctgcagccc gggggctgct    660
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<210> 40
<211> 620
<212> DNA
<213> Homo sapiens

<400> 40
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aaagttgggc atagagatca atacaaatta gacttctttt tagatacgct ctacgctctg    180
cagagccctc tggggtctcc aagggctggg acctgctgga taaaactgga tgaaactaag    240
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tcctagccgc gtgctgctct gccatcgggg atgctaaagt cggggagggc caggaagcct    360
ttctttgctt ggaagttttt gtttctcctt cgcctgctag gttgggataa tccgttggga    420
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32

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ccctaagtta catgttgctt aggcttggtt gctatctgta tggtataaat aattccattt    540
agaaattaag aaattatggg ctgcattttt gatgccagtg gctctgtagt atcccccaac    600
caccaaaaaa aaaaaaaaaa                                                 620


<210> 41
<211> 830
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (814)
<223> n equals a,t,g, or c


<400> 41
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ttttgctaaa atatcataca aatgaaatca aacagcatgt agccttttta gtatggcttc   120
tttcacttgk tataaaataa taaaaattca tttatgttgc tatgtgtttt aatagttcat   180
tgctttctat ttctgaatag tcttgcattg tatggatgtc ctacggttgt ttatccatta   240
gccagttgaa gaacatttgg ttgttgccag tttgggtgat tataaaccca ctctaaacat   300
tcatattcaa gtttttgtat gagcatttaa gttttcattt ctttgatgta aaatcctagg   360
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ctttgtcaga aatgtgtttt gtaaatattt tctgccaggc tgtagcttgc attttcagtc   780
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<210> 42
<211> 4054
<212> DNA
<213> Homo sapiens


<400> 42
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33

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aatatgtgta ttttaagcaa taagattcag ctggtcagac ttttctgggc agtctcagtg    3960
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<210> 43
<211> 452
<212> DNA
<213> Homo sapiens

<400> 43
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gttatccctc ctctctgttc aagttcgcta actaatcacc cagtatccat gctatcgctg    180
gcccttctgt ggcctatttt tatactgttc actgttcagt gtcacttgtt tggtaacact    240
caacatcaac gtgtgctacc aaattgacac cagaggacaa aaaagaatca agatatgtac    300
agcctgcttt gtactgagcc agctgccact agatgttttt tgtgataatg aacacgtgag    360
gccatgtgga cgcgagagat ggctccgggt tccctcagac ggctcacagc cagctggtct    420
gcagtgcggy tttagayycc gatgtgggaa cc                                   452

<210> 44
<211> 625
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<212> DNA
<213> Homo sapiens

<400> 44
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gttatccctc ctctctgttc aagttcgcta actaatcacc cagtatccat gctatcgctg     180
gcccttctgt ggcctatttt tatactgttc actgttcagt gtcacttgtt tggtaacact     240
caacatcaac gtgtgctacc aaattgacac cagaggacaa aaaagaatca agatatgtac     300
agcctgcttt gtactgagcc agctgccact agatgttttt tgtgataatg aacacgtgag     360
gccatgtgga cgcgagagat ggctccgggt tccctcagac ggctcacagc cagctggtct     420
gcagtgcggt tttagattcc gatgtgggaa ccccataaaa aagaatatgc aggccaggcg     480
tggtggctca tgcctgtaat cccagcaatt tgggagcctg aggcgggtgg atcacctgag     540
gtcaggagtt cgagaccagc ctcgccaaca tggtgaaatc ctgcctctac taaaaataaa     600
aaaaaaaaaa aaaaagggcg gccgc                                           625
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<210> 45
<211> 1193
<212> DNA
<213> Homo sapiens

<400> 45
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ctatacatat tgtatatttt aagaattctt tatacaattt taatatactg caatactgca     180
gtttttgaca atttggattc catttggtat atgaattttt gcattcatta ttgaataact     240
cttttaatat ttttgagcaa tgattatact gctttacctt gtgtcacttt tttttttttt     300
aggaaaaact catgttccag tatatttctc ttacagagtg aagtcattac agcactgtat     360
ttctgtgttg acatttgttg gcagtgtgct aagtaatgtt ttttaaagca caggcttgag     420
gactatggtt tacatcctgt tggaaacatt ccaaatggga cttgtgtatt atacccagga     480
ggctctcata tataccatct tggcatctgt actgatgaat aagttataat gaacagttaa     540
aaatgctcat tgaaaattaa ataaaacaaa aaggcagtta tttcatgctt ggtcaaaaac     600
atcaatacct ttccaattaa cactgagaaa ttaaggttaa gattctcctt ttgtactggg     660
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gggatggagt ttcgctgttg ttgcccaggc tggagtgcaa tagcaccatc ttggctcacc     840
gcaacctctg cctaccgggt tcaagtaatt cttgtgcctc agcctcctga gtagctggga     900
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ccgtgttggt caggctggtc tcaaactcct gacctcaggt gatctgcctg tcttgcctcc    1020
ggcgtaacac tttttaagac cagtgtaaca gaaagagaat gtagccattc tagccaccgt    1080
taaaagatac acagtgaggt gttgtgtttt gtttttttaa tgatgaaaag ttacacattt    1140
tttggagaga aaagtcttag ctgaaggtaa atcaatggaa aaaaaaaaa aaa            1193
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<210> 46
<211> 1594
<212> DNA
<213> Homo sapiens

<400> 46
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atgagtccca gatgaattgg ccaagtccta gaaatagagg ggctgcagag cggrgaggaa     180
gaggtcccaa tgaccagccc ttgactgcca ccgttgtca ctggcccct ggccctgttc      240
ccgtgatccc agtcagatgc cacattttta taataaaact agggctgagc aggaargcgc     300
tggcarragt tcattacctt gcttattttc aaactcttcc taacccttct gtcctggttg     360
ttgtttgacc tgaaagatga agagaacact gctgtcttct gtcatctgtc tttctgcttc     420
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tacttatcct gagaaaccct tgcacggcct gtcccgcaga gaaaagacag cccttccggg     540
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ccctgcagct cacagagtca atcagtttgg ttttatttgc atttgaacag aaaccttgag     660
aaaaagaaag ccaatttgtt tatcttctag gggataaaaa taggcaagtg tggcagccct     720
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35

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gtggccacgc aggtcagaca ctgcagcagt gacactgggg ttttattaat caataggatg     780
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ccagctccta cacaagggca gcagtcatct ccggtccagg gagctcttct ggaggttttt     900
gcaagtagat tctagagaac tgagagaaca agaagtcttc cccactctgg gcacatggaa     960
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ggtgaagccc tttgcttcca gctctctgcc tgctcagcca ttgctccgtc cctctgcagt    1500
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agattattta aaacaacaaa aaaagggcgg ccgc                                1594
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<210> 47
<211> 1762
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<220>
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<222> (1748)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1752)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1756)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1762)
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acgcggtccc ggttaaaaat tattttttgc catatgtaat tttgtgttgc aggctgtcga    180
gagataaaaa tgattttaaa tctgtgtact gatgattctt tcggtgttaa gaaacacagg    240
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gttgtgtact tcccttttta tgggcttatg gattctattt atattaagac ctgtttataa    300
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tgataaagtt tatgaatttg gcacttaaca gcagaactaa taagatgaaa gagttgtaac   1680
aatatactct aataaaagtt atttaaaatg taaaaaaaaa aaaaaaagg gcggccgctc     1740
tagaggancc angctnacgn an                                            1762

<210> 48
<211> 1042
<212> DNA
<213> Homo sapiens

<400> 48
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ttgagttcct acagaatacc cggttctggg cttggcgctg gatcagtcag gccctgttgg    180
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tgccagccct gtagtcccag ctactaaaga ggattgcttg agcccaggag ttcgaggctg    960
gaatgagcta tgattgcacc actggactcc agcctgggca acatagcaag actccgtctc   1020
tctaaaaaaa aaaaaaaaaa aa                                            1042

<210> 49
<211> 855
<212> DNA
<213> Homo sapiens

<400> 49
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aattttccac accctcctcg gtatccatgg agagcctggg gccagatatc tggctcatct    180
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cgtccctgtt ttgagggcta wgacttgagt ttttgtttcc catgttctct atagacttgg      360
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aggagggagg caggcatagc atctgaaccc agtgtggggg cattcactag aatcttcaat      480
caacctgggc tctccccacc ccaccccaga taacctcctc agttccctag ggtctcttct      540
tgcttgactc aatctaccca gagatgcccc ttagcacacc tagagggcag ggaccatagg      600
acccaggttc caaccccatt gtcagcaccc cagccatgcg gccacccctt agcacacctg      660
ctcgtcccat ttagcttacc ctcccagttg gccagaatct gaggggagag cccccagaga      720
gccccttcc ccatcagaag actgttgact gctttgcatt ttgggctctt ctatatattt      780
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<210> 50
<211> 1120
<212> DNA
<213> Homo sapiens

<400> 50
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attgtttttga agcaacatag tcttcattaa taataaaatt gctggacaga atgatttta      180
aaagacagcc tatcagtttt aatgaagtat ctagttttta aaatgggtgc gttagtagag      240
cttttatata ttttttccctt cctccttcct tcctttcttt ctgaaaagtt actagaaaag      300
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aaattggctt gcagaaattc gtccaatata agtaaacaac caatagcaac caggtgtaaa      540
tagtttttata ggctaatact accaaacctt taaggaacat ataatttctg tgttctagaa      600
cttgggaaaa gatggagagt tcaaaactca caccgtatgc ctagtataac ctcaatgcca      660
aaccagacgt ggcacgcaca gaaaaataaa atcagaccaa agtcatttga aaaaaaaatt      720
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aaacgccagt tgtactatca gctaaacatt agaaaccttc tcatcaggcc aggtgaggtg      840
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gagttcaaga ccagcctggc caacatggag aaaccctgtc tctactaaaa atacaaaatt      960
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aacaagagcg aaactccgtc tcaaaaaaaa aaaaaaaaa                            1120


<210> 51
<211> 1278
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<400> 51
gcctcaaggt cccggtccgn aattcccggg tcgacccacg cgtccggccg cagccacagc       60
ttgcacgttg cgccgggtgt gtctgtgcgt gccagctgca tctttgcgtr ccatgtgtgc      120
aaggctgtgt ttggctgagt gttcatgtgg sccgtgattg tgggcatgtt tctgagtgtc      180
tgagtgatgc ctgctggtgt gggctggtgg gtgtgtctgc atgtgcgtgt gtgtctgggg      240
agtttcaaag gagaaagagg gactcaccat cacgctggct cagccttaaa aaggtaggac      300
atcctgacac gtgctgcaac atggatggac cttaaggaca ttgtgctgag tgaaacaagc      360
cagaggcaaa ggaacaaaca tgtgatttct cccagatgag gtttctggag gaggcagatc      420
tgtatggaca gaaggtagca tggtggttgc cggggcaggg ggaggagaga atggagaatt      480
agtgtttaat ggggacagag tttcagttgg ggaaggtgaa aaggttctgg agctggatga      540
tggtgatggt ggacaacac tgtgcatgca cttaataccm ctgagctgga cacctaaaaa      600
tgcttacaat ggtaaatttc akgtatattt tactacaatt tttaaaaaat tggctgggcg      660
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38

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tggtggctta tgcctgtaat cccaacactt tgggaggcca aggcgggagg attgcttgag       720
ctcaggagtt caacaccagc ctgggcaata tggtgaaacc ccgactctac gaaatataca       780
aaaattagcc tggtgtggtg gcttgcacct ctaatcccac ctactcagta ggctaaggca       840
caagaatctc ttgaacctgg gaggtggagg ttgcagtaag ccgagatcat gccactgcaa       900
cccagtctgg gcgacagagc aagactctgt ctcaaaaaat aaaagataaa taaaaaaatt       960
agaggccagg tgtggctcac acctgtactc tcaacacttt gggaggctga ggtgggagga      1020
tcgcttgaag tcaggcattt aagacatgcc taggcaacat agtgagacct tgactctaca      1080
aaaaaattca aaagttaatg agacatggtg gtgcacacct gtactaacag ctacgagaga      1140
ggctaaggtg ggaggatcac ctgagcccgg gaggttgagg ctgcagtgag ccatgattgc      1200
accactgcac tctagcctgg gcgatacagc aagaccctat ctcaaaaaaa aaaaaaaaa      1260
aaaaaaaagg gcggccgc                                                    1278

<210> 52
<211> 742
<212> DNA
<213> Homo sapiens

<400> 52
ccacgcgtcc gggatcaaca actgcgtggg aagccggaat tattggttct tcttcagcac        60
tgtggcctcg gccacagctg gcatgctctg cctgatcgcc atcctgctgt atgtcctcgt       120
ccagtacctc gtgaaccccg gggtgctccg cacggacccc aggtatgaag cagcgccagg       180
accctgacca ggaggacctg ggccagagaa gcccctcggg gtgcaggaca agactgccag       240
tctcagcccc aggcatggct gcacccgcac tgcacacagc ccgggtggcg agacagggag       300
gacttgcctg cccttgttcc agaacattcc ggagccaaca cggtgtgaca ttttttttcaa      360
ggatgagctt tgccagctcc acgtggaagt ccctaaagct cctccttcca cttcgaagcg       420
tgactgatgc ctccagggcc tcacagccgc ttctgaagca cttcctgaaa gccagctcca       480
ccctggcgag ccctgacct cagcggaccc aagcccagga cgatgcctgt tgcgttcttc       540
tcccccagta gcaagtcacc ttccccagca gcctccatgt tgtctgggct ctccctgtgg       600
gggatgccag gggagagtga gagagcagag gtggccaaga tggcatgtgc tgccttctct       660
cctggaacat gctgcttcca cagggcaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa       720
aaaaaaaaa aaaaaaaaa aa                                                 742

<210> 53
<211> 1033
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (928)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (958)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (977)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1005)
<223> n equals a,t,g, or c

<400> 53
ggcaagtgca gtagagaaat gggccaagtt ctctggacac gtgtggatgt gtatattgtg        60
ttatacacaa ggccccaaat tcctgcaact atttatacat gcaattgttc tgttgtttgc       120
tgagatggaa atcatataca cagagttaca aattcctgaa atgttccatc tatatttgat       180
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39

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ataaacagac atacagtagc tgagaaagta acacagcttg actattgctc tgtttacctt    240
ctattggaaa aaataattgt atccagaaca ccatatcagc cttatagcac gactgaatat    300
catgttgcaa ttaattaaca acctgatatc tatttgggag caaatttaag ggaagactgg    360
aggcctagga aatagaatac aaaatctcaa aacttttaa aaagaagtaa ttcctgaaag     420
aacaaagcaa actcattcct tcataccatg cttctgaaag ctattccagc agcccytccc    480
ccaaacaggc atgtaattta tggatctttt acaaggtaat aaaccacagt aattacctcc    540
ctgcatccca aactaagagg acaaattaag tcagaacttg aaaataattt aaaagagttt    600
tcccttgttt caaataggaa aaggaaacgc caagacatag aaaaccacgc ttttcccgta    660
ggaagaaccg atgatgagcc ctgatgaaag aaggaagaag acccgctgtc tgcgaaggcc    720
taaaggttag aaatacagca attttttctca tgccgaagga aaggcaaaat ggtctaagaa    780
actgcaagag tgtgatacaa gttttcctca acagcgagct gggactggcg acaatttctt    840
aactcacagc ctccgcagtc gccttagtcg acaaagagag cagcccacgc agcggccgcc    900
ggcccgttgc ccgtggcctt tttatttnct ttttgccctg aaagtttcag ttttagtngg    960
tttttttttgg gggtttncag ggaaggaaac aaacacattt ccctntttga tttttccaaa   1020
accctttttt tgc                                                       1033

<210> 54
<211> 1913
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (14)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (398)
<223> n equals a,t,g, or c

<400> 54
ctcgcaagag antntttgtg tttctaatac aggatctgga agtagtgctt tctaatcctc    60
atttcctgta ggatgttcct gcactataac aagattatgt tttcttcctt ctgcagcagc    120
tttctgcttc ttgggtacta ctagctattg ttcaattcag gtgaggcctg tgatgacata    180
tatgtagcat gtgctctgcg ctccctgcaa gctgagcaga tacaaccaat gcatcactgt    240
atactcttgc tgagaatgtg gatgcagcct cacagatctt tgcaacactc caaccagcca    300
ggaccagttg atcagaactg atcttattgg tctgataacc aatcttattt gtgaactgat    360
tcatatctgt ctttccactc ttggttctct tgccgtanga acaaaaacag tttaggaagc    420
ataattacga acatttagga accaatatgt ataagtaatt cggagactcc aattcacctg    480
cccctcccc atcccaggtt gtggaggctc gaggaagctg acttcttagg ctaaaggaca    540
aaaaaatctc tttacctcct tggccatttt catgttctct gccaattact ataggcagtc    600
ttcattttgc agaggtgagg taagacttca tcttattctt catgtaatcc caccttctaa    660
caaaaaataa ataaatattt aaattccaag gagaagtgtt ctttgtgtat ttctagcaga    720
aaacagatgc ttaagcctaa gaaggaagat ccgtccatga caaaggaaag tggaaaactg    780
aaccagttat ctgaatactt catgccagga cagttgctat tagcaactgt tttgcacctt    840
cagggcttta aaatgggctc tgcagacagc atttgcatat gcaagactca gtagccaagc    900
ctccactgcc aattgttgaa ggcagtttca gatcgccacc ttttgaggta catttcttta    960
agcacaagag aagtagaaat ggcctttgcc ttgtctccag tggtttgtcc ctctggtgcc   1020
tcagcagata ccagagctta ttcttatgac catttggaag tagtcctcaa agtaaagatc   1080
aagaaaaaat tggattcttt ttccatttc tcataatagt agcctagtca acacaagact   1140
cccataaaat atgactcact attgggagcc atactatttt ataagcttac ttcctgctga   1200
caaaactagc tttcctcaag gaaatataaa ggaggggaaa gtcacatagt gttaggaaaa   1260
cattcctgtg ttttgaatac gatgaatcca taggatagag aaaaatctgc ttgttctatt   1320
ctgagagttc tctgagatat cccttcactc tgcttggcat ttggccattg atattcaaca   1380
ggtcactgac caagcttttc taaattttc agagagagtt acttaccaat aaggtctgtt   1440
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cttaaaccta cctagttgat tttcatatct ttccataaag tgtcatgatt ctatcataga    1500
ccctgactta acattgtaag gactatgagt cctcccattt tttaattaat ttttttttag    1560
caaattagga cttcggcagg ttttcctctc ctaaactcat tctttcctcc acaggattgc    1620
tttgtccatc tcctgctttc atttcaagtg cataaacaaa acctcaaagg gcctgggaag    1680
gtgaggcagg ccagagtctg tgttctgtgt tgagtgtcaa gctatttgtt aagaaggtct    1740
gcaacaggcc tttggtgtgg ctctgccaga gactgttctg aacactttgc ttgagatccg    1800
tgccctgtaa aatggatatg atgttttact gatgtctgta atacatttgt aaacttccaa    1860
taaaatttga ataaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaactc gag             1913
```

<210> 55
<211> 1992
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1950)
<223> n equals a,t,g, or c

<400> 55
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ggcggctgcc cgtgacctgc ctgggcgcgg ggaactgaaa gccggaaggg gcaagacggg     120
ttcagttcgt catggggctg tttggaaaga cccaggagaa gccgcccaaa gaactggtca     180
atgagtggtc attgaagata agaaaggaaa tgagagttgt tgacaggcaa ataagggata     240
tccaaagaga agaagaaaaa gtgaaacgat tctgtgaaag atgctgccaa gaagggccag     300
aaggatgtct gcatagttct ggccaaggag atgatcaggt caaggaaggc tgtgagcaag     360
ctgtatgcat ccaaagcaca catgaactca gtgctcatgg ggatgaagaa ccagctcgcg     420
gtcttgcgag tggctggttc cctgcagaag agcacagaag tgatgaaggc catgcaaagt     480
cttgtgaaga ttccagagat tcaggccacc atgagggagt tgtccaaaga aatgatgaag     540
gctgggatca tagaggagat gttagaggac acttttgaaa gcatggacga tcaggaagaa     600
atggaggaag aagcagaaat ggaaattgac agaattctct ttgaaattac agcaggggcc     660
ttgggcaaag cacccagtaa agtgactgat gcccttccag agccagaacc tccaggagcg     720
atggctgcct cagaggatga ggaggaggag gaagaggctc tggaggccat gcagtcccgg     780
ctggccacac tccgcagcta ggggctgcct accccgctgg gtgtgcacac actcctctca     840
agagctgcca ttttatgtgt ctcttgcact acacctctgt tgtgaggact accattttgg     900
agaaggttct gtttgtctct tttcattctc tgcccaggtt ttgggatcgc aaagggattg     960
ttcttataaa agtggcataa ataaatgcat catttttagg agtatagaca gatatatctt    1020
attgtggggga ggggaaagaa atccatctgc tcatgaagca cttctgaaaa tataggtgat    1080
tgcctgaatg tcgaagctct actttgtct ataaaacact atataaatga attttaataa    1140
atttttgctt yagcacttgg ccccattgta gattgccctg tgcagtaaac tttcaaggtg    1200
tcrgctgccc cagattgctt catttgctgg gtgtggaaag agttgctatg gccaggcata    1260
tgggatttgg aagctcagca gaagtgactt ctgctctgtg gttgctgctc cccggctttc    1320
acagacatgg tatggcagcc attctttat ctatttaacc aagaggatgc tggggaattg    1380
tgctgcttgt cctgttggct ggtggctgca ttatgtcctg gggtgtgcat gtgggtctat    1440
ttagagcttc tgtcccttcc ttcccattgc aagttgcacc cagatgagac agctgtagta    1500
ctaggtctct ttcacctctc attgcctgtc cctgcttcga gctggttgtc ttgtgcgtgg    1560
gacatgggcc ttcctatctg tgttttctca aagtcaggag ctgaccagga gcacactaag    1620
gtgtggtcat gcatcataac caacattcac tcatctggga cattcttaag atacatttat    1680
aaatcatttc agcagtagta ctttgtatgt gttgagagtt tacagagctc tttgacatac    1740
gcgatcttag tctttacaaa taaggaaaac agctcagttt gggaagtatc agagatggga    1800
ttcaaaccca gatcctctgg tccaagttgt atgtgcactg aactaatcag gcaggaaaaa    1860
agcccagcca ctgtctcaca gattgttttt tgtatattgt agcaaaatcc tgaaacaatg    1920
gggtccttcc agtctcatcc atacaaaaan tgggcaatct tgggctgggg tgcggtgggt    1980
ttccatggcc ct                                                        1992
```

<210> 56
<211> 1386
<212> DNA
<213> Homo sapiens

<400> 56

41

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ttgagggaat ctgcccctcg agcctaagat tccgccccgg ggtttgaaat tacagcaggg      60
gccttgggca aagcacccag taaagtgact gatgcccttc cagagccaga acctccagga     120
gcgatggctg cctcagagga tgaggaggag gaggaagagg ctctggaggc catgcagtcc     180
cggctggcca cactccgcag ctaggggctg cctaccccgc tgggtgtgca cacactcctc     240
tcaagagctg ccattttatg tgtctcttgc actacacctc tgttgtgagg actaccattt     300
tggagaaggt tctgtttgtc tcttttcatt ctctgcccag gttttgggat cgcaaaggga     360
ttgttcttat aaaagtggca taaataaatg catcattttt aggagtatag acagatatat     420
cttattgtgg ggaggggaaa gaaatccatc tgctcatgaa gcacttctga aaatataggt     480
gattgcctga atgtcgaaga ctctactttt gtctataaaa cactatataa atgaatttta     540
ataaattttt gcttyagcac ttggccccat tgtagattgc cctgtgcagt aaactttcaa     600
ggtgtcrgct gccccagatt gcttcatttg ctgggtgtgg aaagagttgc tatggccagg     660
catatgggat ttggaagctc agcagaagtg acttctgctc tgtggttgct gctccccggc     720
tttcacagac atggtatggc agccattctt ttatctattt aaccaagagg atgctgggga     780
attgtgctgc ttgtcctgtt ggctggtggc tgcattatgt cctggggtgt gcatgtgggt     840
ctatttagag cttctgtccc ttccttccca ttgcaagttg cacccagatg agacagctgt     900
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gtgggacatg ggccttccta tctgtgtttt ctcaaagtca ggagctgacc aggagcacac    1020
taaggtgtgg tcatgcatca taaccaacat tcactcatct gggacattct taagatacat    1080
ttataaatca tttcagcagt agtactttgt atgtgttgag agtttacaga gctctttgac    1140
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gggattcaaa cccagatcct ctggtccaag ttgtatgtgc actgaactaa tcaggcagga    1260
aaaaagccca gccactgtct cacagattgt tttttgtata ttgtagcaaa atcctgaaac    1320
aatggggtcc ttccagtctc atcatacaaa atggcaatct tggctgggtg cggtggttca    1380
tgccct                                                               1386
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<210> 57
<211> 1733
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (893)
<223> n equals a,t,g, or c

<400> 57
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aagcatttgg caatggaaat ggaataataa ttattgctga gacctccact ggctgtttgt     120
ttgctggatc atcgcttggt aaacgaggtg taaatgcaga caaagttgga attgaagctg     180
ccgaaatgct attagcaaat cttagacatg gtggtactgt ggatgagtat ctgcaagacc     240
agctgattgt tttcatggca ttagccaatg gagtttccag aataaaaaca ggaccagtta     300
cactccatac gcaaaccgcg atacattttg ctgaacaaat agcaaaggct aaatttattg     360
tgaagaaatc agaagatgaa gaagacgccg ctaaagatac ttatattatt gaatgccaag     420
gaattgggat gacaaatcca aatctataga gtatttgcct cttaaatgat acctcattga     480
tatattgcac tatttcataa atactataaa ataatgacta ggaagtaact tattaaaggc     540
tatgacttaa atttgaagat gaagtacagt gttctaggtt tgctgagaag gctcattaaa     600
ttaatctcac tttgaatatc tcctgagaga tggacaatga aatatcagtt ggtggatatg     660
tgtgatagct gatttcaata ttgaagtatt gaaataaaat attctttaca cctgaagtaa     720
atacattttt ctttttttatg taattaatta aatcagggat atagatttga tctgtaattt     780
gggtataatt ctaatctttg ctgaaatcac atctcaagta taatgaggca actttatgca     840
aatgtacttg ttgtgacaac aataacattt tcctttttttt tttttttttt ganacagtct     900
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tcgaactcct gacctcgtga tctgcccgcc tcggcctccc aaagtggtgg gattacaggc    1140
gtgagccagc gcaccggca acaataacat ttaataggca ttgtctcatt ctaatgatat    1200
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ttttgagaca gagtctcact ctgtcaccaa gttggagtgc agtggcacaa tctcagctca    1320
ctgcaacctc cgccttccag gttgaagtga ttctccagcc tcagcctccc gagtagctgg    1380
gactccaggc acgtaccacc atacccagat aattttttgca tttttagtag agacggggtt    1440
tcaccatgtt ggctaggatg gtctccatct cctgacctcg tgatccgccc accttggcct    1500
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42

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cccaaagtgc tgggattaca ggcatgagcc accacagctg gccgtaaata ttttttgaat    1560
ttgaatctgt tttggaagcc aaatatgttt tggaagccaa acaattaaga gaagtaaaat    1620
tttaaccccta gtaggtttcg cagattcatc cccagatatg tttttgtttg gcttgtgtta    1680
ttaacaaata aatgagtgtc tttcaaatgg aaaaaaaaaa aaaaaaaaaa aaa           1733
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<210> 58
<211> 2722
<212> DNA
<213> Homo sapiens

<400> 58
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cttgggcaat gccttgtttt ctcctctgaa tatttgcatt tgaaaggatt gcttcctgtt     180
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tgctcttcaa gccaatttac tacacccagt tgtctttcca gaagttcatc ccagcggtaa     540
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acggacacct ggtccgtgga aacaggtgtg atgggcacag gctgctgccc ttctgtctgg     780
tcggggatt cctcttcttc aagctgctca gctaacccag aagaggggag agagtactcc     840
ggtggttccc agagccctc ccgttgtgcc gcttcgacct gacacctgct cgatgctgac      900
ttaggcttcc tgccaccaag caggaaacta gaaagagaac atttcagtgt aaggtctgtt     960
cccgacagca tggattagct tccgtgttct gaagttgttc ttttcatggt gtctgacacc    1020
gagggcgttg ttcgtccatc aggcgggatt ggatggagtc ttggtgtttt gccttctcag    1080
ggaccaaaaa tgtatcattg actccttaac agtgaccttc ctcccaagga catatccgtg    1140
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agcatgagcc agggaggagg atgttttct tcytttctct atttttccct aaattgtgca     1680
aacataggtg agtctcttaa cctttctgtg cctcagtttt tctacctcta aaggggtggg    1740
atggttcttc aaattgtttc taaaacaccg gcactttcag cagtgttctg gtggcctgag    1800
atgagagcac cgtgttcaga agtgcctggg agtggcacag tggaaactcc gcttgcacgg    1860
accatggagt ctgctcagga ccatgctgta ggacacacag cctcatgcgc tgagaaagca    1920
aaggaagtgc tgggtgtaaa gtttgcatga ttccatgaag ctttagtttt cctttttttg    1980
ttttaaaaga aagggtttta tatgttctat tgtaaaatat ggaaattaaa cagggacttc    2040
agaaagccgc acagaaagat caccttcyga tggtgtgatg tgctcctgac attcggccga    2100
ggtctgtatt ctgaaaaaga tttaatggcc tgtgaaacac gtggattctg ttgcactgga    2160
tttgtaataa atgacgctga acttcctgct tccaagcagc tcaaccctga tgctgaactg    2220
acaccaggcg aatgtcaggg ctcccaaacc actagtgcca aagggtcatg ttgaaaagtt    2280
cagaatattt atttgtcaga atataataat tgccccccac cttagtattt ttgcacttta    2340
cagaaattta gatactgttt ttcagtggct tgagcgtttt gccttttcaa aggataacta    2400
ttattttctt gaaaatggaa tataatcatg agaggaagaa gatgtaaaaa atgtcaaatg    2460
ttgattggtt gtgtaaaagt tttgtcatag acatgtattg gggagcttcc aattagcata    2520
catagacaca tgtgtcagtg gccaagacct gcttatattt tgctttatag atgtagtcat    2580
agcatgttgt tattgcctca tgtaaataaa aaggctatta agttttccag taatatttat    2640
taatctgtat gtgttttaaa ataaaataac ttatttctag ctgaaaaaaa aaaaaaaaa     2700
aaaaaaaaaa aaaaaactcg ta                                             2722
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<210> 59
<211> 1094
<212> DNA
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43

<213> Homo sapiens

<220>
<221> SITE
<222> (470)
<223> n equals a,t,g, or c

<400> 59
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ggcacgagta cttgcatatg gtgaattact actgttgaca gtttccgcag aaatcctatt      60
tcagtggacc aacattgtgg catggcagca aatgccaaca ttttgtggaa tagcagcaaa     120
tctacaagag accctggttg gttttcgtt  ttgttttctt tgttttttcc cccttctcct     180
gaatcagcag ggatggaagg agggtaggga agttacgaat tactccttcc aatagtagct     240
ctgaagtgtc acatttaata tcagtttttt ttaaacatga ttctagttaa atgtagaaga     300
gagaagaaag aggaagtgtt cacttttta  atacactgat ttagaaattt gatgtcttat     360
atcaagtagt tctgaggtat tgatagcttg ctttatttct gcctttacgt tgacagtgtt     420
gaagcagggt gaataactag ggcatatatt ttttttttt  gtaagctgtn tcatgatgtt     480
ttctttggaa tttccggata agttcaggaa aacattctgc atgttgtatc tagtctgatg     540
tacttatcca tctcattaca aacaaaaaca cacagactgc atttgtagct ctgtaatcct     600
tgaatacgga agtaaatttt cttctttcct gactttgaca ttgtagctat actgtttcca     660
ttttgtttt  tacaaatcct ttgggtctaa ttctgtgagc ctacctatag cactggatta     720
aaatgtctgc atcatttctt tagttatcca gttaacttta aaactgttgt aaaagtgtaa     780
accagcccat gacaggtttt tgtacatgtt aaagaacttc attgttcagt tttcatgatt     840
attgtgtaag gaagactgat gtagatgttc tgtgctgtcc tggaccatgt taattacact     900
tacgacgtat tttagttcca catcacaatg atttgtcccc agtgacccct ttatcctttc     960
taggcacatt tcttgttgtt gttgttgttg cagttcccct ttgcattgta ttgctttgac    1020
aactgtaatt tgaatcagat ctgaaagagg tccagaataa aatatatttt gatattaaaa    1080
aaaaaaaaaa aaaa                                                       1094
```

<210> 60
<211> 1839
<212> DNA
<213> Homo sapiens

<400> 60
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aattcggcac gagtgggcag tgaaatctag ctagatgacc ataatatgtc tgctttctt      60
gactttatta ttattacttt ttaagggcat tgttcaatcc tcgattttgt atctatggca     120
gcaggtgaag gtctctagat gagcgttcac atacacgatg acaaatggtt aaggaatttt     180
gaggctaaaa tctttactgc ttagatgtca tgtactttat aggcatagca tttctagatt     240
taataggaag gatctctgct ctgtatgtgc ttttatgtga cttgcaaagg aactattcca     300
tttaaataga tttcaattag gataatgggt ttgagacatt tcacaatggt atattttcta     360
gactcttaag atagaattgt caaattatag caaatagagt tagaaattat tttgcaattt     420
tctcagcaga ttgtaatttc tcctgccata catgtagtca ttgtaaaaat aatagtgtaa     480
gggtaccttt tataaaactg attattttcc aaatagactg gtacctttg  gtttagaaaa     540
aaaatgatgg aagaagattg tagttcagga gagcaagcag aaagcagtca tttttcagcc     600
tttcatttta ttgtaccttt ggtcacattt ttgaagaaag gcccaaaatt gccatatgta     660
tgaaagaata ttggtaatgg ggtagagttg gaatgaaagt gagattttca gagtaacaag     720
gtcactttct tctgtggctt gtagaaacag atatgtgatc acaacaggtc cagcagccag     780
ggttgggggg agtagagagt tcatgtaatt tgtatcatgc ttaaatttcc atatttgaaa     840
aagcaactag agaacaggat tttgtcaaaa caaagagaaa aaaataattt ttttaaacag     900
gaggggaaa  tgtacgtgtt attcttacag gatgttgaaa aatgtttaaa tagctgcgat     960
acagtttgtt gaggggcag  gggacagtgg gaacagtgac taaagggtta cattttgatg    1020
tagaaatgcc tagttgaaga aaaaagcttg cctgggagga agtttctgt  ggagatgtac    1080
cctgcatttg gagtgatgta ctgaagcatc aaagactcag cattaatttt gatctttctt    1140
gggaagctgg agaaaataat gcatttctga gaaaaaatag taacttatga aatgtcaaag    1200
cctgctctgg acaatgtcaa catccatgag tgcgaggcaa attcaagaat ccaaaccta     1260
agtgaagacc ttcctgacct gctgtctaga cgtcagggc  tgtttgagcg gtgaggtcca    1320
gcgggttagg cattccaaag atacgagagg cccacaccca catcaggatt gtgtgttagt    1380
tctcaggctt cctaggattt ttcttgggaa aaggtttttg accccaagtg ctcccagct     1440
tgacagaaat ctttagaggc agctcagaaa aactttggtt tcccaaaata atccaaaggc    1500
taaagttctg ccacccttta aaagagtagt gttttggctg ggcgcggtgg ttcacacttg    1560
taatcccagc actttgggaa accgaggcgg gcggatcacg aggtcaggag ttcgagacca    1620
```

```
acctggccaa catggtgaaa ccccgtctct actgaaaata caaaagttag ctgagcatgg    1680
tggtgcatgc ctgtagtccc agctacttgg gaggctgagg caggagaatc gcttgaaccc    1740
gggaggtgga ggttgtagtg agccgagatc ccaccactgc actccaacct gggcagcaga    1800
gtgagactcc atctcaaaaa aaaaaaaaaa aaactcgag                           1839
```

<210> 61
<211> 1964
<212> DNA
<213> Homo sapiens

<400> 61
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ggcacgagaa aagattcatt tattgatttg tgcttcaggt ttaatttgaa aacaaaaaca      60
ataggagaat tggaggaaag gaatgggagg acagagtaca tgtgttggca tacctttgct     120
tagctctaga ggataatgat gcagatttag atcaattatg tagctgtgct gaaatttccc     180
tcatttgagc acctttaatg tgaattatta tgtgttcttg ctggacttac actgttacat     240
cattgtcaac ttgcttagtg tgctcagaaa taaaattttc atagctttcc tctggacctt     300
gttttaaagg gtaatatatt gatccacttg gagacaagag gctggtaata gaaatttggt     360
acttggtaac aaaattgctg aatgtgtgaa ataagctttg aaaaatatat gttatggtta     420
aaatgttgga agggcctcag aattttcaca gcagttattt gtgtattttc tttctaggtg     480
catgctatta tgatgctaat cagtctatgt atgtgtttgg aggctgtacc cagagcagct     540
gcaatgctgc tttcaatgac ctctggagac ttgacctaaa cagcaaagag tggatccgac     600
ctttggcttc aggtaagaga tgaaatgctg atctttgcct ccttaccagg tgactccctt     660
ggcatggaaa ctctacctga tcatttttgg tgttggtctc aaggataggt tactgggact     720
caggtcctta agtttaatgt gccatgtaaa tgataatagt aatatgcttg tgtaagtctt     780
tgtttttttgt taaattatac tttatcatta gtaatggtgc cctgccaaaa ttgctgtact     840
gctgtgtgaa ttcatttgca tggttttctc aagtatactc atacaggtgt gatacatcat     900
ttggtaggag gttgaagtaa gaacagaaac acagagtcgt gagaactgta gttgactgac     960
agaagctatt gtcctagggc taaggtctct gaatatctgt tgttgttgcc agctcagata    1020
tttggggagt gtatgggacg tgcctctgct agttactctt aacaacccag gggtgtggga    1080
agattctaca gtaggtacat tcctacccag tcccactatg ccagaaatct ggcagaaaga    1140
aactagatta ttttcttatt tttgacctaa cctctcctgg gggaaaaaat aaaaacaatg    1200
gtttttgcac tcatgaggca gggcaatttg aggaggcata gattggaggg gttggtgtga    1260
tggagaaata gtgtccactg agtataaagt attctgctag gtttttttggc aagcttttcc    1320
caaaacattc atttggcttt ttagtattag gactcagtct taggactaag gacatttggg    1380
tttccattgg gcaagttcct tatttatta ggccttgcct tactactttg attaccagat    1440
aggaggcatc attgtatatt agaaagggca ctggactaag agtgagggga catgagtttc    1500
atttcctggc atagtcacca attctccatg taactataaa taagttattg cacttctctg    1560
ggagaaatgt ggagtagtac taaatgacta tttttaaatg ggctaaaaag gctagtttat    1620
gtttccctt ctataaccgc tactgtgaat gtctaggcca gggacttaaa cctgtttatg    1680
agaagaagct gcattttgct tccctaaaac ttaagttcct gttctttccg cctacattag    1740
gcaaatatag gaggagccta ctgagtggat accatgggtg gagctgggct ttgtgtagat    1800
gaagttcttt attaaaatta ttggcatttg gagggtagga gggtggtggt ccagtctgca    1860
gatggccaca ccaggaggag gagctattat atcccttct cttccacttc ctgtcacaac    1920
caataaaggc cgtttgtgcc attcataaaa aaaaaaaaa aaaa                      1964
```

<210> 62
<211> 1330
<212> DNA
<213> Homo sapiens

<400> 62
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ggcacgagcc tgcagctatc attcatccag ttaagaattt gaagaagtgt gtgcacaaag      60
tatcacaggc accggaaaat atgcacatga tgctggagca ttagaatgca acagaaagag     120
ccctgggctt ggagtatgca gaactggttc ttgttacaac tcctcttact agtgggctct     180
ggaagaaaac acattgaatt catgatcatg gttaaccttt ggagagagag aggagaccag     240
gatgaaggag ccagtcgaag atcctgttca agtgtacact gagccagcag gttcaccaga     300
aagctattga gcgtttgctg gaacacatta tgcagggtga atttctcctg gaatgttgcc     360
aaggattttt tatgcttctg tggcaggcat ttcttgaaca ttgtcattta gccaagcaaa     420
gaagatttttc ttaaaggata gaaaatgttt aaaaatttttt gtttgtttga agataggtta     480
aatggctata tgatctcagg ataagacaga gaaaatcact tatttctcta agtgatctga     540
ttaggttagt gatgtttttgc ctttaaacag attcatcatt attcctaaag tattgctgta     600
```

```
ttaatactgt ctctagaaag tatccaccag tgcctacttt tcttcgatat cattagctgt     660
ttttcgaaac tgaatttgct cttcagagat ttctcatatg tttgcgtata aggaactact     720
ggtaatagcc aagaaaattt ggaggtgcag agaacatgct gaaacagaat ttcactttca     780
attctagaac tatgccataa aaaaaaagga aaatgtaaaa atgtctttat attagagcag     840
atattttaaa agtattgcaa attcaatgat aaattctaag gttaaaattg gacacataaa     900
aaatacaata tataaatatc tccccagaaa ttattatcta atgaatagta aaagctgact     960
acaaaccatg tcattttaac aagggtttaa atagtaccaa gattctcatc atatgctctg    1020
ggatacccag tgatgtacaa gggttctctc taaacatggg gaggaaaaat ttcaaatata    1080
aagatttgaa tcttgtcttt gccattcact agctgtgtga tcttgggtaa gttacctggt    1140
ttctctgagc ttcagtgtca tctgtaaaac aggaataata atacctagct cagaggtggg    1200
tgtggtggct cacgcctgta atcccagcac tttgggaggc caaggcaggt ggatcactag    1260
gtcaggagtt tgagaccagc ctggccaaga tggtgaaatc ctgtctctac ttaaaaaaaa    1320
aaaaaaaaaa                                              .            1330
```

```
<210> 63
<211> 1504
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1120)
<223> n equals a,t,g, or c

<400> 63
gctcctctga tccaggagca ttggcaggtt tgtgttggga ctgctggtta agttggagct      60
gtgtaactac ttagtttttg gtagccaatc agaacgcatg ccccacatat tccagctcgg     120
tacatgttga taaacagact catccaaact ttcaaaatgg attcgtacta aacatgctca     180
ggttttaaat tttggttttgc ttttgagctt ttcctctttta tgtggctctt aataataagt     240
agttagaatg aaccaagcca tcccagttat tccaagcagg ctctcaaatg acctttgagc     300
acccttcacc tggctggtcc ccagkccagg gtccacagcc ctgctccctt ctcagcaagg     360
agggtggcct gtctgacagt gcagttgaac ctttgctccc tactctgcaa cttttgaaga     420
cttcaggcta atcaaaatta cttataatta gaatcaagtg cctttattct tgttttttat     480
ttttatttta tttatttatt tttttagatg gagttttgcc cttgttgccc aggctggagt     540
gcaatggcat gatctcagct cactgcaacc tctgcctccc gggttcaagc gattctcctg     600
cctcagcctg ctgggtagct gggattacag gcatctgcca ccacgcccgg ctaattttgt     660
gtgtgtgtat atgtctatgt gtgtgtgtgt atgtatatat cttttttttt tttttttagt     720
agagatggtg tttcaccata ttggccaggc tggtctcaaa ctcctgaact catgtgatcc     780
gcctgccttg gcccctcaaa gtgctgggat tacaggcatg agccaccaca cccggcctat     840
tcttggtatt ctttattctt ggttttctag cctttagaaa aaaaaaatct agtcttggta     900
aagaaaatgt tcattttaat caagctccag tacagcttgt gtcaagacct agtaagacca     960
cctttaatgt gttcctggat atgacattaa aaactaactt gaaaattgtt aggatatttc    1020
cttgttccct acttttattg taaaatctac tacattctta agaattaaaa aatgccattt    1080
cagaagagat gatagtttta tcttggccaa ggaattatcn ttcttagtag cctatattgg    1140
cttattccaa aaaaggcgtt aacctccatc aaaacatctt ctgcgcctct ctctcagcat    1200
atgctttgat atttgaagtg tgtaatagat tggagctatc agtcacttat ttctaaaaaa    1260
tgtattcttt tttcttcata gctgtgaaga gggataccaa ggaaagttct ttctgctgtc    1320
tttctctttg gtaatgctta tcttatgaac actcaactga aaaaacactc cacctaaaag    1380
caggaaagat ggcaattcta aatagcagct attatccccg ggtataaact attttttgttg    1440
ttggcttggg ctttgctgc aggtattaat agtttaaaaa aaaaaaaaaa aaaaaaaact    1500
cgag                                                                 1504
```

```
<210> 64
<211> 1828
<212> DNA
<213> Homo sapiens

<400> 64
ggcaacctct gcctccaggg ttcaagcaat tctcctgcct cagcctcccg agtagctggg      60
attacagata tgttcctgac ccttccttct tgaagggaca gctgtgtaac cattcaacca     120
tctggccatc agtttccaca tctgtgaaat caacttctgc ctcatggagc catgagttcc     180
```

46

```
caagcagtga aggcagtgag gggctgtggt gtgatccagg aggctgagaa ttatgcagtg       240
ggtgctgtca ccttgaagac atcagcgtga tcaggcagat catcatggta ctgcatttcc       300
tggacacgat cttaattttc ttaatacctc caccgacatt tcaaatagcg tctctaatgc       360
cccagagact tttatgcccc taaggtagtt ttctttcttt tgtgaagcag aagaagggaa       420
attgttaaag ggaatatttt aactaaattt atttccataa aactatcttt gtctttatat       480
ctcatagaaa gtgttaggta gcctcaggat tatatctccg ttggaaaact gtagatgtaa       540
accttcttgc tatctacata cttacatatt tttctgttgt tatttactta tgaatagcat       600
tttgattata gcagaaataa aatacattaa atgactaagc tcagaaataa gaaaaaaagg       660
tcaatggtga tcatttattt ggaaactatg atattttaat gatattaatg gtgtaattga       720
catttagtta aacatatttc atcgtaagta gagcacttta actcttacgg tccacttaaa       780
atgtaatcat acatttatgt atttctagtt aatgtatcaa actcaactga gtaatcaatg       840
tacatcattt attttgctcc taagttaata cactaagtta tgctttaaaa ttactaattt       900
gctgcaatat ccaatactct cttttaartc ttacgtgtgc agaaaggat ataamcattt        960
catgacacca aacccaagta tttttgatgc ccttggcagt gtcagttgaa cagacagtgt      1020
catttaatgt ttgagacagc atctgaattc cttttattct taaaattcta ttttaaaatg      1080
cagtttttgg aaagtwaatg tgaatagaaa aatttctaac attttatgtg catgtgtttt      1140
gtttgttaca ggcttagcat ctcaaatctg aaaattcgaa atctgaaatg tttctaaaat      1200
tcaactcttt tgagtgctga tatgactttc aaaggaaaag ctcattggag catttcagat      1260
tttggatttt tggatttggg atgtttaacc agggtaaaat atagaatgca aatattccaa      1320
aatctgaata aaattgaaat ctgaaatgct tatggttcca agcattttgg ataagggata      1380
attaagctgt ataacttata aaactgaata taacaaaatt tcccaacatg tggaaaatga      1440
tgtctttttt caaaaatgtc aatagcagat acatggtaca gtaagttagg ggaaaaaatg      1500
aggtttcata tcttctagtt tcctaattaa aaggagccca ttctgggttg gaagaaagtg      1560
tcagtaagat catttctcct atttgaaaat catrcaaagc ttgtcagagy gactcaggcc      1620
aggagtgtag ctgggcgtgt agctaaatga tatctcccca catctatata ataagctgtt      1680
acctgcttta aaaggaaaag ctctcagcat gactctaatg ttgcatttct ggaatrcagc      1740
ttgaaaagct cttctcaggg ttgaacagag catgaaggta atggttatta tctactcaca      1800
ttaaaaaaaa aaaaaaaaaa aactcgag                                          1828
```

<210> 65
<211> 1280
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (893)
<223> n equals a,t,g, or c

<400> 65
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gaattcggca cgagctcctg tggaggaatt tctccctttg gaactaagac ctctaagcca        60
gtggggcata aaattatgag aacaggaaga ataaattttg ctagtgggtc accagggtta       120
ataatgcatg gtgccacttt tgtttctacc ccttgattcc tggctatgga gggaaaaaaa       180
gtaccattta ttggatgctg attcagagcr tatatatagc cctctggaga actctgccct       240
ccctgcmagt wattgccacc tagctggtgc tataactgaa tcttcaaaag gccatcccat       300
catcctatta ggccagcttc tttagcatga taaggaacat agaccagtga attccaggag       360
caatgactca tactgaaatt yttttgctgt gaykgaktct tgatcasaag caatgttgta       420
tggaatatga caatgggtaa agcattccat gagaccatgg atgacaattt ggcagaatt       480
ttgtatgagg aagcaaatct gtatcgaggg tctgttctag taagaacaaa atgctacccc       540
ttccatgatg gaagtagttc aatgtaatca actacaaagc tgactgagca cccagaggaa       600
tagtgccata cttggagtca gtgtygttkt cwgctgctsa ctggttgggc cctcagcagt       660
ggcatccagg ttggccttgg atagtggaaa tccatattgc tgagcctatg tatgamctcc       720
attcttgcca ctgtggccac tttgttcatg agccatgaac aaagaggata ccagttagcc       780
tctttcccca gccctgttct gacaggggtg gctggaatag agactgactg gtttccacag       840
acttgattat cctatattca cttcattatt aaaatcctcc tctgctaaga tcncctttgg       900
tgagaatttt atggcataca tccttctttt cttttcttct tttctttttt ttcccattga       960
gagaggtctg tcctgggtgg gtgtgatggc tcatgcctgt aatcccaccg ctttgggagg      1020
ttgaggcgag tggatcgctt gagcccaaga gtttgagacc agcctgggca acattgtcaa      1080
accatctctt caaaaaaata cagaaattag ccaggtgtgg tggtgcactc ctgtggttcc      1140
agctacttgg gaggctgagg tgggaggatc acctgagccc gaggaggtgg aagctgcagt      1200
gggctgtgat cgcgccactg cactgcagcc tgagcaatag agtgagatcc tgtctcaaaa      1260
```
```

47
```

aaaaaaaaaa aaaaactcga   1280

<210> 66
<211> 1528
<212> DNA
<213> Homo sapiens

<400> 66
aattcggcac gaggtttgtg gaaacaaccc ttagaatcct attatttttt aagaaggaaa   60
aattggacag cctcctgagc cagagtaggc tcggagactc ctgttgtttc taactgaaat   120
agtaaataat gtatttccac catttaccca gagtaggctc agagactcct gttgtttcta   180
attgaaacag taaataatgt atttccacca tttagtagct tttcaagagt ccttaaaaat   240
ttttggacag cacagaaaca tggattactt agccctttag ttctcagatt gagttatata   300
cttcccagca atttctgtta tttaagattg ctatctcatt tctggtgtaa tacttacatg   360
gaagtctttc tctatttggg ggtggtgggg ttctggcaca taggaatttc ttaatggcag   420
aatattctga aattctcggc attaaagtat acttgataat tagttcactt aatattaaag   480
catgttcatt cttttcttcc caggtcgcta ttaaagcatg aagactttct gaaacctgcc   540
ctagagctgg gatattgttt gtgggcaata ttttttattg tctcttgttt aaaaagtgaa   600
cagtgcctag tgaagttagg tgacttttac acctttтacg atgactactt ttggtggagt   660
tgaaatgctg ttttcattct gcatttgtgt agtttggtgc tttgttccaa gttaagtgtt   720
ttcagaaaag tatgttttgc atgtattttt ttacagtcta aattttgact gctgagaagt   780
ttctattgta caaaacttca tttaaaaggt ttttctactg aatccagggt attctgaaga   840
tcgaagcctg tgtaaaatgc taccaaatgg caaaaagcaa caataaacag tttgattttt   900
acttttcttt ctaacatatc aatgcttagc agaactattc agattgtcag tagtaaattt   960
aaagacaaat gcccgttttc ctccagtcca tgaaacatac catacttata tacctgcaac   1020
taagtgttta aaattatgct ctgtaactct gtactgctag tattagaact aaaaatctta   1080
aaatacagcc agtgcttaat gcttatatca atgtggattt gtcggctttt atgtaatctg   1140
taatatgtat agcaggaaat acgaagagtt acacagtgta tgccttaaaa ggctgtttct   1200
taaaggtgtt acaaggggat aatggtattt caactagtta tcagcaagtg acaatacatt   1260
ccaccacaaa tacactcttg ttcttctagc ttttagacta tatgaaaaaa ccgggtgctt   1320
caaagtacat gataagggaa cactatacct gtcatggatg aactgaagac tttgcctgtt   1380
cattttttaa atattatttt caggtccttt gcttaccaaa ggaggcccaa tttcactcaa   1440
atgttttgag aactgtgttt aaataaacgc aaatgaaaag aaaaatgttg gtgcagctgt   1500
tcacaaaaaa aaaaaaaaa aactcgag   1528

<210> 67
<211> 1458
<212> DNA
<213> Homo sapiens

<400> 67
gaaaaaatga tctctgattc atcagcatga atttccaagt ttggggtaca gggcaatgca   60
ctttcctcag tttatttata ttattgtttt taaaaatttg caatacttac caaagataaa   120
ggatttgtta gaaacagctt ttggaagagg agcagtgata taggtttatt ttactaatga   180
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taaatggatg ctgcaattac agtaagtatt atcattacaa acccttgtaa aataaagaat   660
aatatttaca tgaatctttta tgttaaagta agttaacatt tttctttttta cagtgagttt   720
cagatattta gtcatatata aaaataaatg taaaaataga cattatgact cagatataga   780
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tatcagactt gacagccatt gataagataa atagcatttc ttagaattat gttattggtt   900
taaaaaactt gaatatttcc tttgtcaaga ttaataaata taacaattag aaaaaaaaat   960
tataaagttt tccacagcat agttctttaa atgaaaggat aatatttact ttaatcttat   1020
gtatgtgtac tacagacttt cagaatttta tgaacagatt tgttctataa gcattatttt   1080
actattttaa cattattttcc tagaatrttt tttcactgkt attattttca cacacctcag   1140
attaaatttt aaatttccat taaaacacct agaagaatga ttgaaatcaa aacataatac   1200

48

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tttcttttta tgataattac ttttatcctt gcagttaaaa agacttgaac ataaggaagt      1260
gcttaaaatg tacactaatg tgaatataca tgcacactca cagttacatt gtcactgagg      1320
taaataagaa ggtagagcca tggaccaggc acttggcctc ccataatccc agtgctttgg      1380
gaggccaagg caggaggatt gcttgagccc aggggtttga gagactctgt cttaaaaaaa      1440
aaaaaaaaaa aactcgag                                                    1458


<210> 68
<211> 1538
<212> DNA
<213> Homo sapiens


<400> 68
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ttatctcttt aaaagtggct tctctgcctt ccattaatca tgatgggatg cttgcaatac       180
tttcagcaca gaataacctt taaggaaaga catcgtaagt gattgtccaa gaccagtttc       240
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tggctcaaag catggttcag gatttcttgt gagcatgttt cagtagcagc cagtgacgtg       420
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gagtaggaat ctcaccattt gcaatgtaat tgtgcctctt cctttgcact gatgttaggg      1080
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gtgttagcac atgcctgtaa tcccacctac tcgggaggct taggcaggag aatcacttga      1440
acccaggagg cagaggttgc agtgagccga gattgtgcca ttgcactcca gcctgggcta      1500
cagagtgaga ctccatctca aaaaaaaaaa aaaaaaa                               1538


<210> 69
<211> 557
<212> DNA
<213> Homo sapiens


<400> 69
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caaagccact tccacatttt caggcattat agcaacaacc ccattcttgg caccaatctt       180
cttagtccat ttcgcgctac tataacaata tttgagactg ggtaatttgt aaagaacaga       240
gattttaggc taggcgcagt ggctcacaca tgtaatccca gcgctttggt aggccaaggc       300
gggaggattg cttgaggtca ggagttcaag actagcctgg ccaacatggt gaaactgcat       360
ctctactaaa aatacaaaaa ttagctgggc atcctggtgg caggcccctg tagtcccagc       420
tacttgggag gctgaggcac aaaaatcact tgaaaccggg aggcagaggt tgcagcaagc       480
ctagatcatg ccactgcact ccagcctggg tgacagagca agactctgtc tcaaaaaaaa       540
aaaaaaaaaa ctcgagg                                                     557


<210> 70
<211> 1568
<212> DNA
<213> Homo sapiens
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49

<400> 70

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caaacaaatg gatggtgtct gtaagtcggc aaacactggt gacatttagc cttgtttatg     180
ttcctttcct tttgctgcat attttttggct ccaaaagcta ctggctgaat caacagggcc    240
tctgaatcag gagagaagtc tggtagcatt aattttagtt gctatgtcca tattctcttc     300
agactgcatg aatcctactg ctcaggacca agtctaggtg agaggagagg gcaatcaacc     360
tctttggttt cggatgttgt gtgcaaagcc cagggttcaa ataagcagta attatctcct     420
attacttagt gctgatcaac agcacctcta cgtctaattg ccaacctgcc ctaatcatgt     480
tgactattct tgctttagcc agagacagaa ggaccaaatt ttataaataa cactttattg     540
tcattattcc attaaacgat taggggatgt ggccctgccc ttgctttcaa atgcctctag     600
ccctgatggt ttctggatta tttaataaat ctgcacattt tcttgcaggt aagtgacact     660
ccctgtccta gtcggtctat ctggacttgc ccttgtctgt tcgtggtcct cggtggttat     720
ctgcagcttg ttaatcgtgt aaagtcaaga gaagaatgta tacacatatg tgtgttgaat     780
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agagaatcag aggctaaaaa tattccccca tatgttccag tattagtcat ggattgcaaa     900
ggcttagtaa cttgagcagg agagaaaact ccctcaaagt cataaatcct gagtgacaac     960
tgctgctgga tgacagatcc cttcacctgt ggacaacctg gctggggggtg ggggctgtt    1020
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taagttataa taattgtagc tttctgaata agtgtcaaac tatatcttta agtgtgctgt    1440
atgctgagtt acaagttagg tcatttatga atggaatgta aaataatact aaaaatgctt    1500
caataactta tcttggtatt gctaataaaa aaaaaagct gtgaaacatt aaaaaaaaaa     1560
aaaaaaaa                                                            1568
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<210> 71
<211> 1228
<212> DNA
<213> Homo sapiens

<400> 71

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ccttctttgg ttattaatac tgatgttatt taagaaatgc aaaaaggcct ctttagtttc     180
taagcggtct tggatttaca tagcataaaa attagaatgg atttaaatgg gagtaaacag     240
caggagcttg caaagtcagg cccatctgac attgttatct aggctgtgtt ctttgagtat     300
ggaaaatgac aaggaaacat taacacaata gcttaatagt ttacttcctg tctttggtca     360
aaatgttcca aaaactgaat tcttaccttg aagtcactgg cctttgggtg atgaattcaa     420
ttgtaatcac tctgggtttg ctcatgacag taatgcagta acttaaagtt agaaaataat     480
ttcaacccag gagcatctta aatagaagtc attattgtct ctatgtaatt cttgttggaa     540
tgtttctttg ggcaatttaa actgcccaca cattagggca gtgactttct gagcattttg     600
tagcaattag agttgttgtt tctcgttctt ggcattgttt ttgttgcctt gtgagagaag     660
atgtgtggca ggatgctgct cttaaaactt ttcctttaaa ttgactcaag ctgttacttc     720
cttctgaatg tctgatctta taagacatag tagatgctat taagaaagat ttgtttttact     780
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ggctgaggcg gcggatcac ttgaggtcag gagttgaaga ccagcccggc aatatggtg      960
aaaccccgtc tctactacag atacaaaaaa acaattagcc aggagtggtg gcaggtacct    1020
gtgatcccgg ctgctcggga ggctgaggca ggagaattgc ttcaacccgg gaggcggagg    1080
ttgtagcgag ccgagatcac accattgaac tccagtctgg tcaacaagag cgagactgtc    1140
tcaaaataaa tatattacaa taaaaaataa aaactcaaat gataccagaa aaaaaaaaaa    1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaa                                      1228
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<210> 72
<211> 1715
<212> DNA
<213> Homo sapiens

<400> 72

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gagctgggcg agatgttgct tatgcttttg gctgcaggtg gggacgacga actaacagac   180
tctgaagatg agtgggactt gtttcatgat gagctggaag atttttatga cttggatcta   240
tagcaacctt gcgtggcgtg tgaactggtc tgctgacctc agacagcaga tgtcccctgt   300
ggtggtgtgg cagtgcctgt gttctctcct aggcaggcct ctcaactcca ggtgctgtcc   360
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tttccctgtt gaaaaaagtt acaaaaataa atcttaaagt tagttttttg taacacgaat   480
ttaactgtca gacagttagt gtaggtgtgt tgcgtcatct gttttcaacc agattgcatt   540
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ggtgtttatt gtagtggagt aatgggtttg cagtgataag tcatactttt ccaccgaaag  1440
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ggtttgtcca tctactgctt tgattccttg gatcccaccc attctttcac tttaagaaaa  1620
aacaaataat tgttgcagag gtctctgtat tttgcgctgc cctttgtaa gaagcacttt  1680
tcccaaataa aacaattaaa aaaaaaaaa aaaaa                               1715
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<210> 73
<211> 1896
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1871)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1884)
<223> n equals a,t,g, or c

<400> 73

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gaatctggtt tccccaagca tcttcttttt cgatcactgg gattaaactt ggccttggct   180
gatcctcctg agagtgaccg acttcagatt ctcaacgaag cttggaaagt catcactaag   240
ctgaagaacc cacaggacta cattaattgt gccgaagtgt gggtggaata cacctgcaag   300
catttcacga aacgagaggt gaataccgtt ttggcagatg tcatcaagca catgactcca   360
gatcgtgcat ttgaagattc ctacccccag cttcagttaa taattaagaa agttattgcc   420
cacttccatg acttctcagt tctttttctca gtggraaaat ttctgccgtt tctggacatg   480
ttccaaaaag agagtgtgcg ggtggaggtt tgcaaatgca tcatggacgc ctttatcaag   540
catcaacaag agcccaccaa ggacccggtc atcttgaatg ccctttttgca tgtttgcaag   600
accatgcatg actctgtgaa tgcactcact cttgaggatg agaaaagaat gctgtcatat   660
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ttttatgttg agtccaggtc gatgtttttgc aatctggagc ctgttcttgt gcagttgatt   780
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cagtgcctct cccaagctga tgctttttc aaagccgcta taagccttgt tccggaagtt     1020
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tattctgaca atgaagaaat gggagttgtc agagcattaa aatgcaatct tcactaaaaa     1860
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<210> 74
<211> 2075
<212> DNA
<213> Homo sapiens

<400> 74
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acggtttaca aaatgtcact ccctcatcac ccctacagtg cccttctcac tctctttttt      180
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tgagcagata cagtacatgt atatattctt ttatctccct tttttgtttg tctgtttctg      300
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ccacacctcc aacattgtga tcaaatttca acctgcactt agggtcaaat acccaaacta     1620
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ctttatctgt ttatttcttt ttctttttct gaattawtta watatatata tcaccctatg     1740
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acgcctgtgg tcccagcact ttgggaggct gaggcgggtg gatcacctga ggtcgggagt     1860
tcaagaccag cctgaccgtc atgaggaagc cccttctctg ctaaagatac aaaattgcgg     1920
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52

<210> 75
<211> 1592
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (805)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (857)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1587)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1588)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1589)
<223> n equals a,t,g, or c

<400> 75
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ctgtatgtgc tagccgtctc tgttacgaga tcagctgtcg tggaatcagt gctagtgttc   180
aggtaactct tatttaataa ttgcctcaaa gtgcattgtg ctgtgcctaa tttataaaat   240
aaacggtatc ataggtatgt atgtatacga aaaacatagt atatgcaggg ttgggtacta   300
tccacagttt caggcatcta ctggggggtc ttggaatata tccccagagg taaggggtga   360
ctactgtata cagccatgcc aacatgctgg ttctcagaga gttataagag agattaaaaa   420
tacatgcagc tgtttgggca ctttcttccc aaataaaata cccagtaaaa tgtaacatac   480
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tgtgtgaggt taaaaaaaaa aaaaagnnna ga                                  1592

<210> 76
<211> 1324
<212> DNA
<213> Homo sapiens

<400> 76

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tatgtgtttg tgtgtgtatg cacatgggca tgtctatgtg taaggtcaga aggggggagcc   180
tgaattatct actgcttttt tggttaacta gtcctatttt taaaactttg tctaactccc    240
aaaacttatt aatgcgacat gtagtactga attagaagtt attgttaaac tcaggacagc    300
tctgtggaga ttcacaaagt aatttcatga aaacttatga ggaagttgtt cagtactgtc    360
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aaacaaatta gtatacgaat tattattttt cctcaaattg taaaggtttt gtttctatta    480
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tatcaaaatt aaccattaaa ttaatagtcc ttaaagttgc tatgtatatg gtaagtaaaa    600
caattcctat tctaagttat acatggtatt aaattctagg tacagtcgca tgaagcatta    660
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aaaa                                                               1324

<210> 77
<211> 1214
<212> DNA
<213> Homo sapiens

<400> 77
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cagataatca ctgtttctcc ctttaatcct tttagagaca aagtaagaat aatatacaat    180
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gaactaatta ggacaaactc tgtagtttat ttaaataata aaccagtaga ctgggtgcgg   1080
tggctcacgc ctgtaatccc agcactttgg gaggccaagg ttggcagatc acgaggtcaa   1140
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aaaaaaactc gtag                                                     1214
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54

<210> 78
<211> 1338
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (266)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (327)
<223> n equals a,t,g, or c

<400> 78
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tccagcagcc actccagagg ctgcagctca gaaatgccta ggtaccagtg accagcctgc     180
tcctcaacct ccctggccag ctagtcttgg ttgccctgtt ttctgaaacg tacctccaca     240
tcamaggcca ctcttggctg cttranctgc actgtragta agttgttctg cttsctgtcc     300
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accacgaaga gcacttctga tgtcagcagc aagcaccctt catgctcctg gcctgagccc     420
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ttcctgttta aaaggagaaa agtgaggcca ggggccagct gtgaaaagat ggtcacttat     540
cagtgctcat tatttaccaa tggggcaacc tccacaaggg caaagggccc tcaccaatcc     600
agttacccat tttagcttga aatgtaattg tcagttctca gactgattct gattaacaga     660
acctgcttcc tcctgggaac aaagatttcc cttggttttg cttattagct cctttctcc      720
ccattagaaa tagcacctct aattagagtg ctggttccac agggaatctc aggccctcta     780
gcaagactgg gtttctctgc caatgtatga ccttccttga gtggttaggt acggaacaga     840
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ctcttgtgct gcctgagatg ccagtgccaa caatggctac tcctgggcty cctggaagca     960
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atgctgcaat gatgtcatct gttcagagcc atccataaaa tgttacagat ccaaaatgat    1260
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aaaaaaaaaa aactcgag                                                   1338
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<210> 79
<211> 1686
<212> DNA
<213> Homo sapiens

<400> 79
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ttcttccttt atcttattac gtgccagaaa ccctccttgc cccttgactt tttcattctt     180
ccctcttcgg aggtataata taaccattgt acagtggttt agagtttagg ctactgtgat     240
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agttttgac attgaacaac aggcaacatg ggactgttat ctctaagaga agggaaaaaa      600
ccaaggtgat ccctacagtt gccctggctt actgcttagg cacagtttct aggctacagc     660
aaggaaagag aaccaaaaac tgraactggc aaccttactt gactagagmc agagatgaca     720
gtctgagaag agtaaggcaa agtgctgaaa aggctggaac tctctacaga gmcakccct     780
tggttttttg tatatatagt aatctgtgca tgaatgagat gaagttcctc aaagcccaag     840
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ttccataacw aagtgtagag caagccttgg aagaagcaaa ctgattagca ggttacataa    1020
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caaaaatacc aacttacatg accagtaagc tgaggaggga taatcaatca ataggtaaaa    1200
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aggtatgatg gctcacacct gcaatcccag cactttggga ggctgaggca ggaggatcac    1620
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aaaaaa                                                                1686
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<210> 80
<211> 1634
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (311)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (567)
<223> n equals a,t,g, or c

<400> 80
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tttttgtttc aacaaaactt cgaaacaaaa tggaagaaaa taatctacag tgcagtagtg     180
tggttgacgg taattttgaa gaagttccca gggagacggc aattcagttt aaacctccac     240
tatacagaca gcggtaccag ttcgttaaaa atttagtgga tcaacatgag cctaagaagg     300
ttgcagacct ngggatgtgg tgatacttca ctcttaaggc tgctaaaagt caatccatgc     360
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gtgtattgaa ttaatagaac atttggnatt caggtggatc tggccagatt tcctggaagt     600
ggtatttggg tacctgtctc catccatgat tgtcatcagc acaccaaact ctgaattcaa     660
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tgtttataaa gctgttttta ccacctcata cccaagctta cagcaggaaa ggttctttaa     960
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aaggcggaaa gaacaggctg gggaacgggg tgataagycc aaagacawtg gtggctcaaa    1080
ggcccctgtc ccatgctttg gaccagtctt cacagaggtt gagaaggcca agatagagaa    1140
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tgtgctcact tagaatttag ttttttttgt gtaatcctaa ttcaagtaat gtttttaaag    1440
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aaaaaaaact cgag                                                      1634
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<210> 81
<211> 2012
<212> DNA
<213> Homo sapiens

<400> 81
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tcaaagaaat ctgccaacat gtatgtggac tcttgagagg tgggctttcc cagtacatgc     180
taaacagact tgttatgcca agaggaagtg aatagaaatg atagcatcaa atatccaaac     240
tgacaggaag tttcttttgc atagcataga acatggttgt cttctgagtt ccactaatgt     300
tccaggatat cttggccctc tgcctctggc tgctccctgg tgtttggcac catagcgttg     360
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ggtagaaact ttacccttaa tttcaaatga taccaaacag ctcattacta ccccaaggga     480
cgctctccgt agcttctgga ttccccagtt tccttctaga aacaaggact ccaatagcac     540
tataacccta aacaggccct aacccagaag aatacaccac aaaatgcgat tgattttctc     600
aaaatatcac agtcttagac actatacaaa taattcaaga aaattctttc taccctgcag     660
tggatatagt attctattat attctccagc aaaactttta ggacttttca aactcatttc     720
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aaaaatatga tgacctgatg tgttctcttg tatttgattt gaactaccta aataggctta    1860
actgtaataa taaatataca attttggcag gcattttttc ctttgtttgg atgaacattt    1920
tgttattggt ccacttctaa ttttgtctta aagagttata aactcagtgt caataaaaca    1980
tcttgttata taaaaaaaaa aaaaaaaaa aa                                    2012
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<210> 82
<211> 1322
<212> DNA
<213> Homo sapiens

<400> 82
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ttttggctgt gacagggcag cactgagttc caatgcaaag tttcacaatt acttcactct     180
tcctcctcca aacacacgga ctctctcagc accacaaggt actgctggag aatggcggat     240
gagtggtgta gacaactcaa gaccatcttt tctacgctct tcagtgcctc tttccttggt     300
aggatgttaa aactaagtac tgtgatcact cacctgattt ttggttctta tgaaggtgtt     360
ttcttgtgtg gatagttgtt caatttggt gttcctgcag tagagacaat caatggaggg     420
ttctgttcaa ctctcttggg ccaccttctc caatcctgtt ctacttaatg tatcttggca     480
aactttccat atcagtacag agaaagcttc ttcattctga ctgctgcata gtatcccagt     540
gcttgaaggt agcatgatta atttagccat ccaattcata ggcacaggtt atttgggttg     600
ctttctatta cttgtaatta caaacagtgc tattctgtta tatcttgaac atatattttt     660
gtgcacatta tagaaaatgt caaagtgatt ttcatgtagg ttgttccagt gaatgagagt     720
tcttattttg tcacatactt ggcaaccctg agattatcaa tacgatttaa atctgtctgc     780
caaacagata ggtttgtaaa aatgtacttt attgtttaa tgtgaatttc tttgattata     840
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agtaacaatt aagaatattt ccaaatattt gtgaaccatt tttctttttt tgtgagctgc    900
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taaaacttgt atatattaat gatatgattt agttgtgtcc ccactcaaat ctcatgtcga   1020
attgtaatcc ccaatgttgg aggaggggtc tggtgggagg tgattggatc ataggggcag   1080
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ttcccctttg ccttctgcca tgattctaag tctcctgagg cctccccagc catgcttcct   1260
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aa                                                                  1322
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<210> 83
<211> 941
<212> DNA
<213> Homo sapiens

<400> 83
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actttaatga cttttttaat ggggtggggag gtggctgggg tgctgggggtt gaaggaagtt   180
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tttagactag gactgttcta ctgtgaagaa agttctgtct cctttagccc ggtttgtttc     360
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gatgtgactt tttttttaaa gtcatctctt cagcaatcca gaggttcctt gacctcatta   480
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agctctgaga acaagaaaga gtggacaccc gttcccctgc atcatctgta ttgcgtgcta    840
tttcagagtg gggaagtgat aaactatttg ccttctggag ctctttgtga aaaattaaaa    900
aaaaacttag ctcaaaaaaa aaaaaaaaaa aaaaaaaaa a                        941
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<210> 84
<211> 1874
<212> DNA
<213> Homo sapiens

<400> 84
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cacattacca tgatctggag cattgttaca tgttggattt gtgtgtgcac tggtgtgttt   180
atgcaaggga gactgaattc acaagtcaga ggtgaatctg agcctcatta ggcagaatat   240
tcaacccagc agaaaattga atttgtcgca caaagcactt aaacctacaa cccattgcaa   300
gaattgaaat cagatcaggg ataagtgata tcagaatctg ggaaagccgg aggtgagggt   360
ggagggggaag aagctgaaag tctcaaagca agcatcgttt tcaccttggt ggggtgaaat   420
ttcaggacag gattttacct gaatgccaca gctgaggagg aaggtcagtt gcagctttag   480
gcgatttacc agctttgaga aactagtcag tttaggaaat gattagggta ttaaagctaa   540
ggtttaagat aaagaaagaa aaggccacct agttgagatc caactggttg gacttgggtt   600
tatgggaaag agagacagtg gttatggttg ctgtgggaca aggtctggaa acagattcct   660
gagggacata gcagctggca gtgggcatag atggaaatcc caaatgcctc tttcttctga   720
cccctctgtc ttaaacaggg tagtgtggct gattttaggt catgtgcctg atagcagtgc   780
aagagaatat acaagaggta attgggagat aaaactctgg tgcagttgtt actgggggca   840
ctcatagtgt acacaggaga aaaatgtcat ggaatgtttc attagctgca tccttggatt   900
agagaaaaca ccttttccaga gcctccttcc tcctgcccgt taggttacct gggcatcgac   960
tccctgtcct ttgagatagt cagctccctg aggccaagga tgctggcttg agttggtttc   1020
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acaatcctca agacttgaca tcagctctgg aatagtagag tgggaatgct gcagaaaaga   1140
tccagagagg aaagaaggca ccgagatgtt aaaatgcggc ttgttgacag aatacttggg   1200
attgtgcagt gctgctattt ctattttca cttttggcag gtatttatta tttcactgat   1260
aggagacatc aagttccagc attttaatcc tgtacttgaa acctacattt acaagcactt   1320
```
```
```

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cagcgccact ttggcatatg tgtaagtatg atctgaagga actacatgtt gttggatctt    1380
tggatttgta ctcttaggac tggattgttg agaaacgaga cggacctatt actattcagt    1440
aaatacgcct gttaaggcag aactcttatt ctaagcttcc gggtggaaaa agggaaccat    1500
ctaagtattc taactctgaa aggggggctaa gatcagggcc ttcattctgg atcaggcgaa    1560
atttccttaa ggatccagaa taggccaggc gtggttgctc atacctgcaa ttccagcact    1620
ttgtggggag gattgcttga ggccaggaat tcaagaccag cctaggcaac ataacaagaa    1680
cctatcttta caaaaaatta aaaagttagc caggtgtggt gacacacacc tgtagtccta    1740
gctactcgag aggcttaggt gagaggattg cttaagccca gggaagtcaa ggctgcagtg    1800
agctgtgatc atgccattgc actccagcct aagtgacaga gcaagactta gtatctaaaa    1860
aaaaaaaaaa aaaa                                                       1874


<210> 85
<211> 643
<212> DNA
<213> Homo sapiens


<400> 85
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gtagttcttc ttttctggat atgactgtca gtttcgtcat gagatttctt gctctcattt     120
cgaactcttt cttttcttcca ctttctttgg gggcgacccc cgatccatgc caggtcttcc     180
tgtgaagacc gttccaacct cgtttccatt tcttgaatgt tgagtattac aacatcactg     240
cgctagggtg cttcatggtg ctgttctcga agaggccagt tgggctgaat ctccttcctc     300
ccactggctc ctgatatctt gctgtatttt gtcttctttc tgattttttcc ctaggggttt     360
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tgtatgtatg gactggttaa agtgagtttg ggcagctgac tttatggtat gggttggctg     480
acttttgttc aacattaaag acaaaccaac aaattgtaca gctgcacaca gaacaccttt     540
gagtgtgaac ttgaatggca actagaggct tactttttga acttcaggta tgtaactcaa     600
aagtaaataa aaacactatt ttttcaaaaa aaaaaaaaaa aaa                        643


<210> 86
<211> 1669
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1601)
<223> n equals a,t,g, or c


<400> 86
aggaaccact tgagcccggc aggtagaggt tgcagtgagc tgagatcaca tcactgtact      60
ccagcttggg cgacagagcg agactccatc tcgaaaagaa aagaaaaag aaaagtctgt      120
ttcatcagaa caggtttctg tgttgacagg atttaccttt caggccatta attgtgttgc     180
tctgctctct tcctgacttc atattgcttc agaagagatg tctgcttcca ttctttgttc     240
ctttgtacat agtgttttttt tcatctctgg ctgcttttca gtggttttta ggaaaatgat     300
tatcacatta tttatgtagt tttttgcaca ttattttgct ggagttgttt gaacttcttg     360
gctctgtgtg tttatactgt ttattgaatt ggataaacag ttgtacaccc atacagtgaa     420
tactgaacaa caaaaagtaa tgaagtattt atacacgcaa caacacgggt gaactgtaaa     480
tcatgacctg agttaaagaa gcccgggaaa ataggtgcca tatggattca tttatataaa     540
acttgaagat gcaaactgat ctacagacaa agatttgtgg ttgcctgggg atggtggaca     600
gatggatcga tcacaaaggg gcatagagac ttttggtgaa aaaggaaatg tttttatctc     660
gattgtcatg ttttcactga caaatatgtc agaactcaac aaattatata ttataaatat     720
gtgcaggtta ttcttcgcca attatgtatg tcaataaagt tgttaaagga taaaaaatga     780
agggtttggc ctgcactttt gggaatctgt agttctctta gtgacccatg tatacaaaaa     840
ttcttaagtg taggttatgg tgtttttaac aatttataat actgatgaag tttaattagc     900
aattcagaag tacactttaa ttaatttgat gcatacaaaa gtgtgcaatt ataggtctaa     960
tgctatgcta ttgattgttc agttttgctg tagtgaatgt gaatttttat tttagagatg    1020
aggtctcact ctgtcgctca ggctggagtg cagtggtgcc atcagagctt actcaacctc    1080
ccaggtcaag tgatccttcc gcctgagcct cccaagtagc tgagactaca ggctgaatgt    1140
gaatgttgaa tgaatgaatg aattggtgtt aaacaggcta aactgtctca gaacttgtgg    1200
attgtgctga aagcagtatg gcctctggca gtgaagtaaa ccttggccca gatactgcca    1260
```

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tgaggtggct atctagctga acattttagt acaattctga gacttgcata tttattctct   1320
catttcctag aaaataccgg ccaaaaaaag tatgaggtct ataaggagga ggaaaaacat   1380
gaagtttaac atgcctatag aaaaatttac atcccatgaa tgtatataat ttgctgctgt   1440
tttacacagc aaaagcaccc ctgtgactag cacccagatc aagaaataga acaccaccta   1500
gctctggcag ctttttaacaa ttttattctg ccgggcgtg gtggctcaca cctgtgatcc   1560
cagtgctttg cgaggctgtg gtgggaagat tgcttgcgtt ncaggagttc aagaccagcc   1620
tgggtaacat agcaagacct cgtctctact gaaaaaaaaa aaaaaaaaa   1669
```

<210> 87
<211> 948
<212> DNA
<213> Homo sapiens

<400> 87
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cggccgtcgt gggggaagcg aaggttcctg attccaccta cctcctaagt gaaggcttcc    120
gtccctggag aggaggcggc gccctgtatc ggccttcgtc ctccgcggga gctgcggcgc    180
caagatgagt ggagaggaga acccagccag caagcccacg ccggtgcagg acgtacaggg    240
cgacgggcgc tggatgtccc tgcaccatcg gttcgtggct gacagcaaag ataaggaacc    300
cgaagtcgtc ttcatcgggg actccttggt ccagctcatg caccagtgcg agatctggcg    360
cgagctcttc tctcctctgc atgcacttaa ctttggcatt ggtggtgacg gcacacagca    420
tgtactgtgg cggctggaga atggggagct ggaacacatc cggcccaaga ttgtggtggt    480
ctgggtgggc accaacaacc acggacacac agcagagcag gtgactggtg gcatcaaggc    540
cattgtgcaa ctggtgaatg agcgacagcc ccaggcccgg gttgtggtgc tgggcctgct    600
tccgcgaggc caacatccca acccacttcg ggagaagaac cgacaggtga acgagctggt    660
acgggcggca ctggctggcc accctcgggc ccacttccta gatgccgacc ctggctttgt    720
gcactcagat ggcaccatca gccatcatga catgtatgat tacctgcatc tgagccgcct    780
gggctacaca cctgtttgcc gggctctgca ctccctgctt ctgcgtctgc tggcccaaga    840
ccagggccaa ggtgctcccc tgctggagcc cgcaccctaa gcatcctgct gccttcccac    900
aacattaaac tctccttcct cagaaaaaaa aaaaaaaaa actcgtag    948
```

<210> 88
<211> 2007
<212> DNA
<213> Homo sapiens

<400> 88
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ggcacgagct aaccttagag gtatcccaat tggaatgtta gttctgggaa acaaagtcaa     60
agcagtggga gaggtaacca attctgaagg gacatgggtg caactggatc agaacagcat    120
ggtagagttc tgtgagagtg atgaaggaga ggcatggtcc ttagctagag acagaggcgg    180
aaaccagtac ctccgacatg aagatgaaca agctcttctg gatcagaatt ctcaaactcc    240
tcctccaagc cctttctcag tgcaagcttt taataaaggg caagttgcag tgcccaagga    300
tttgattatg gactcggaaa tagcaaagtt ttgactgttt tacccactgc aggtgaccaa    360
ctgagtgcca tattgaattc cattcagtca cgacccaatc tcccagctcc ttccatcttt    420
gatcaagctg caaaacctcc ctcttcccta gtacacagcc catttgtgtt cggacagccc    480
ctttccttcc agcagcctca gcttcagagt gatcgaggaa acatctcaac atcttctaaa    540
ccagcctcta catcaggaaa atcagagctg tcctctaaac acagcagatc gcttaaacct    600
gatggacgta tgagccggac tactgctgat cagaagaagc caggggcac agaaagttta    660
tctgctagtg aatccctcat cttaaaatct gatgctgcaa agttgaggtc agattcccac    720
agtaggtcat tatcccccaa ccataacacc ttgcagacat tgaaatctga tgggaggatg    780
ccttctagct ccagagctga atccccagga ccaggttctc ggttgtcatc tcctaagcca    840
aagactctcc cagccaatag gtctagccca tcgggtgcta gttctccacg ctcctcctca    900
ccacatgata aaaatctacc tcaaaaaagt actgctcctg ttaagacaaa gcttgatcct    960
cctcgggaac gttctaaatc agactcttac acacttgatc cagataccct ccgcaagaag   1020
aaaatgcccc tcacagaacc tttgagagga cggtcaacgt caccaaaacc aaaatcagta   1080
ccaaaggatt ctacagattc ccctggatct gaaaatagag ctcctctccc catgtggtac   1140
aggaaaacct ccacagtgag gtggtcgaag tctgcacctc aagtacttta aaaacaaata   1200
gtctaacaga cagcacctgc gatgacagca gtgaatttaa gagtgtggat gaaggttcaa   1260
ataaagttca ttttagcatt ggaaaagcac cactgaaaga tgaacaggaa atgagagcat   1320
ctcccaaaat aagtcgaaaa tgtgctaata gacacaccag gcccaaaaaa gaaaatcga   1380
gttttctttt caaaggagat ggatccaagc ctttagagcc agccaagcaa gccatgtctc   1440
```
```
                                      60
```

```
cttctgtggc cgaatgtgcc agagctgtgt ttgcttcctt cctctggcat gaaggcatag    1500
tacatgatgc aatggcttgt tcttctttcc taaagtttca tcctgaactt tccaaagaac    1560
atgctcctat aaggagtagt ttaaatagcc aacaacctac agaggaaaaa gaaaccaagt    1620
taaaaaatag acattcatta gaaatatcat ctgcactgaa tatgtttaat attgcacccc    1680
atggaccaga tatatctaag atgggtagca tcaacaaaaa caaggtattg tctatgctta    1740
aggaaccacc tctgcatgaa aaatgtgagg atgggaaaac cgagaccact tttgaaatgt    1800
ccatgcataa cacaatgaag tctaagtctc ctcttccctt aactttacaa catttagtgg    1860
ctttttggga agacatctct ttggctacta tcaaagctgc ttcccagaat atgattttc    1920
caagtcctgg ttcctgtgca gttcttaaaa agaaagagtg tgagaaagag aataagaagt    1980
ccaaaaagga aaaaaaaaaa aaaaaaa                                         2007
```

<210> 89
<211> 1687
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (380)
<223> n equals a,t,g, or c

<400> 89
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gtttaagaaa atgtttggat ggggcgattt tcattccaac atcaaaacag tgaagctgaa      60
cctgttgata actgggaaaa ttgtagatca tggcaatggg acatttagtg tttatttcag     120
gcataattca actggtcaag ggaatgtatc tgtcagcttg gtacccccta caaaaatcgt     180
ggaatttgac ttggcacaac aaaccgtgat tgatgccaaa gattccaagt cttttaattg     240
tcgcattgaa tatgaaaagg ttgacaaggc taccaagaac acactctgca actatgaccc     300
ttcaaaaacc tgttaccagg agcaaaccca aagtcatgta tcctggctct gctccaagcc     360
ctttaaggtg atctgtattn acattccttt atagtacaga ttataaactg gtacagaaag     420
tgtgccctga ctacaactac cayagtgaca caccttactt tccctcggga tgaaggtgaa     480
catgggggtg agactgaagc ctgaggaatt aaaggtcata tgacagggct gttacctcaa     540
agaagaaggt cacatctgtt gcctggaatg tgtctacact gctgctcttg tyaactggct     600
gcaaaatmca ctagtggaaa mcactctgat gtaatttctg cccagtcagc ttcatccctc     660
agtataattg taaatcatca cagattttga attcacacct gaagacatgc tctcacatat     720
agaggtacac aaacacaccg tcatgcacat ttcagcttgc gtctatcatg attcctgttg     780
agagggcttt cattgtctga ctcataatgg ttcaggatca actatcatca aacggaagga     840
ttaactagac agagaatgtt tctaacagtt gctgttatgg aaatctcttt taaagtcttg     900
agtacatgct aatcaataat ctycactcat gcattcctac tgcttggagt agctgtactg     960
gtaaatacta ctgtaggagt atctgcttgt taaaatggaa aaatgtgtct ttagagctca    1020
gtattcttta ttttacaaac acaacaaaat gtagtaactt ttttccagca tacagtaggc    1080
acattcaaag tggtccaaga tggctctttt ttctttgaaa ggggcctgtt ctcagtaaag    1140
atgagcaaac atttggaatt tacatgtggg cagacattgg gataacaact ttcatcacca    1200
atcattggac ttttgtgaag tcgacaccag ctaaggctgc ttaaaataag ttctgatcat    1260
tatataagaa gggaaatgcc tggcagacac catgtaagtt ataagtgtct gtcttatctt    1320
tactacacat attgtaacaa attcaatatc ctagtcttca tttgtatgaa tggtttgtat    1380
tgtacatagt ttaaccaagt gttatttgag ctgcttatta atattaactt gtacttgtct    1440
ctctgcttgt tattggttaa gaaaaaagga tatgaggaat tcattttatc aatgtagctg    1500
tgaaggccat taaaaagaca aacttaatgt acagagcatt tattcagatc aagtattgtt    1560
gaaagctata catatacaac attacagtct gtctgtattt agatatttta tttctggaaa    1620
aaatgaaatg tacataaaaa taaaacactt aaagttgagt ttcaaaaaaa aaaaaaaaaa    1680
actcgag                                                              1687
```

<210> 90
<211> 952
<212> DNA
<213> Homo sapiens

<400> 90
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ggcacgagct tattttctgg tggaggagct tagtaagtgg tgctacaatt gctgtgcaaa      60
gaaattccag aggggagaag aatgtaaaag tttggtggtg ggtggcttgg cattgcccct     120
ttttcccacc gattcggtgg ctggtgaagg tgggagatgt gaactccaat taagggactg     180
```

61

```
gagagaggtg aagaattttg caggtgggag atttggattt gaatgtggac ttgtaaatga     240
cttgaccttg ccatctgtgt tcaaggtcac ggtttgctgt ggggttcctg ggagagctta     300
ctcaccccgg agtcttttct ttctcttgct ccaagaagag ccctgttggt gctttaccac     360
cgcttggagt ctcccgagga cacaaacagg cagagaggga cgtgtaggga gagttctttc     420
ctgttttctg tgctttcctt tttacaggac tcccggaagg ccactcatgg ccatgccagg     480
agctttctca gaaacagtca taaacgatct cttgagtctc tttcttgtcc tcccagctga     540
gctttcttat tccacccttt ctggtgtcta taggaatgca tgagagacct ggacgttttt     600
ctgctctctt ctggcctcca tggagccatg ggctcggctc ggcggctcct cacctcacaa     660
tttatttcct cctcccgtgc cagcccttct tttgtgtctg aaaccggttt taaaatgtga     720
ctctcccaga gaagaagccg ctggctgtat gaaacttgac ggcgcttttg taaggtgcca     780
cccccaaact ttaaggtagc taaaccaatt tttaaaagat tcaatggctt gttcatcctc     840
cagatgtagc tattgatgta cacttcgcaa cggagtgtct gaaattgtgg tggtcctgat     900
ttataggatt tcataattaa aatgtctgct gaataaaaaa aaaaaaaaaa aa            952
```

<210> 91
<211> 1410
<212> DNA
<213> Homo sapiens

<400> 91

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agggaaaaat aacacagcta ctcctcactg caaaaacata tccatgcgta gaatcaacaa      60
ctccagtcat gggaccagga ggagctctgg gacgcagaca cattccttgg atgttgattt     120
tttttatgat ctagtaaagg aataggtaaa gtctttgatg tcagtgaagt ggcaacatag     180
ccaaaaagtt gggtaccttt taggaaatga tgttgtaagt ctccttaatg tatcctgagg     240
taagtttcct actggcagca gattttgtaa gaattacttt taagaatttc attctttttg     300
tatggtcatg gagctccaac catttttaat aggaaagtct tttgtaaatt gttgtcgttt     360
taatgtcatt tctgtcttta taacttgatc aagaatgatt ggaaggcaaa caggtttaca     420
aatcaattct gtgacttttg aaaagttgac aatgttgtca gatttaaacc agtgtggcta     480
gtaaaaagca gctcactcaa tgtgggtggc tccctattcc tttacgctcc ccctatccct     540
accccacaag cctttcgatt ataaaatact accaatcttg ttataagatt actgtggagt     600
agtcaagtac tccccgggcc ttctgagctg gtggaatatt ttatttcaga ctgaaaacag     660
agagcactct ccttgggaag ggaaagcgga gcttgctgag tgagagatgg agcctcatgg     720
tgtacaactg agggtagtta actcatcact tctcccaagc actcgatccc agcttcaccc     780
actggtgttg ctttgcttga actgttcaag ccttttatag ccttaccata agtatttaga     840
tatggtgtcc ttttctgttt ttggggggggg agtttgttg tgttttttta aagtaagtgc      900
ttaagtatta actttgggtt gtccctctg tatgtttcga aggggttttg gttctttttg      960
cttctgtttt cttaaacatg ttttccactc ccacttgggc atttttggaag ctggtcagct    1020
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ggtaaagcta gaaacctaca ctgtcacttt actgagattt ctgagtatac ttttcatatt    1140
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tattaaaact ctactttttt atggcacata ttagcatata agcctttatt ccaagaggta    1260
tttattttttt cacttgtaaa aaaataatgt ttccacgtaa agaactctgt tatatcctag    1320
aggactctgt ctttttatatt cgggataata aagactttaa agcaaaaaaa aaaaaaaaaa    1380
aaaaaaaaaa aaaaaaaaaa aaaaaaaagg                                      1410
```

<210> 92
<211> 1759
<212> DNA
<213> Homo sapiens

<400> 92

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ggcacgagca caagccctgt gagaggtgtg tttggaatca cttggtatcc aaatcacatg      60
tcatccctag gagcaaggag accggttgga tttggggctg gtctggaatg aagaagcatc     120
tctcagcttc cgaaggctgc atggctcacg gcagtatctc aatcatgccc tgcccgtttg     180
cacatttggt cctgttggta gttacctctc tggtgactgg caaagtcagc aaggatattg     240
gggtggagca ccctggctaa gcaccctctt gattatagag ctatggagta gaagacagat     300
ggagaatgag aggcctgtga gaacaatcag tcagttgcca tctttcagag ctgctcgagt     360
tcaaaagtgt gtcatacagg gtattttacc attgctacct ttaagggatt caggtgggaa     420
cctaggctgt ggcttacat aatggaactt gggtgccatc ctaccctgtg atgttgagct      480
ggccagcact ggtgtaggaa cctcaaggac tctgtgcttc tctggtttgg ggcctaggat     540
aaacacaggc cctgcttgcc ccttggttct aggacacatc ttcccatgcc agcaaagtta     600
```

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atgaaccagt ctacaagata actgttgaaa gaattcttag agaaacaacc cacaggaggg    660
gagccatgtc agagcccaag aaaaccatcc catcctgagc tctgccttct gtgctgctct    720
ctgcatccta ttctctgtcg gaacaggacc ccactgtgtc cttgctcttc taggcagagt    780
tgtgggagag tgctaaatgc ttttgagtgg ggcagcctgt ggaatgggat ctcatactgg    840
ctccttagac cttgggccca tgaactcagt atggagcagg acctgcgatg ttctgatgga    900
ttatacccac agtgtatttt ggcacatctg ccaaaagcta caaacaaccc ccaacaacta    960
cacactatat cttgtgagaa gtgtcctacc caggagtcct gaatgtgatc tgagtatgct   1020
ctaaggcagc cccaggaaaa gcaattcagt ccctctctct ttgcctttag acctgcaggc   1080
tgggacaatg aaaagaaaat agctatttta catgaaaatt ttacaaccgt gaagccggaa   1140
gatgcatatg aagactttat tgtgaaacct cccgtgagaa agctggtcca cgacaaagag   1200
ttggcagcag aagatgagca ggtgttccta atgaagcaac agtcactcct tgccaagcaa   1260
ccagccactc ccacgagagt ttttgaattt cctgcaagag accttctgg ttctccaagg   1320
acccagggtc ggggagggcc agccagtgtg cctagttctt ccccaggcac gtcagtaaaa   1380
aacccggacc caaacatcaa aaataatgca gcaagtgaag gggtgttgcc cagcttcttc   1440
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agcacagcca gaaagtcagg acaaaagact gtgttgtcaa atgttcagga agaactggat   1560
agaatgactc gaaagccaga ctctatggta acaaactctt caacagaaaa tgaagcctga   1620
acctccttaa aaagtgcata tgtcgaatga ccaaataact atgtatattg atctgctaag   1680
accaggattt ttctgatatg gcacatgcta tcagtttttt ggggcagggg agatgaactt   1740
taaaaaaaaa aaaaaaaaa                                                 1759


<210> 93
<211> 810
<212> DNA
<213> Homo sapiens


<400> 93
gattactaac attttaata tgacacaaat tctgttttct gttttgaaga ttagcaccac     60
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tggtaaaatt gctggtgaag ttaactttta tcatttctcc actaattaaa agttcagatt    180
ctgggatcac atctctaagc tgttcatatc aaagagctat tttttaaaga tcctgattat    240
aggcaacaaa agcaaaaata aacaaatagg attacatcaa aactgaaaag cctctgcaca    300
gcaaaggaaa caacagaatg aagagccaac ctacataatg ggagaaaata tttgtaaatt    360
atacatctga taaggggtta ataatcaaaa tatataagga actcaaagaa tgcaatagta    420
agaaacaac ccaattaaaa aacaggcaat tccagcctgg gcaacatggt gaaaccctgt    480
ctctacaaaa aatagataaa attggccggg cacggtgctc acgcctgtaa ccccagcact    540
ttggttggcc gaggtgggtg gatcgcctga ggtcaggaga tcgagaccag cctggccaac    600
atggcaaaac cccacctgta ctgraaatac aaaaaattag ccgggtgcag tggtgggcgc    660
ctgtaatccc agctactcgg gaggctaagg caggagaatt gcttgaaccc gggaggcgga    720
ggttgccatg agccgagttt gcaccattgc actccagcct gggcaacaag agcaaaattc    780
tgtttcaaaa aaaaaaaaa aaaactcgag                                      810


<210> 94
<211> 1675
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (465)
<223> n equals a,t,g, or c


<400> 94
caccgcggtg cggcgcgcct ctagaactag tggatccccc gggctgcagg aattcggcac     60
gagctgaaat aagtattaat acctaacatt taatattaat tctgtcctat gtgcacttac    120
aaatacgtca tataagtata taaattgact ttacctatta tatgcagaaa ttgaagggg    180
gaatttctgt gtttctagct ttcttgttaa tgtgaagggt ggggcatttt atgttttttc    240
aggattgcct tattcaatga agcaagctgg gtttcctttg ggaatattgc ttttattctg    300
ggtttcatat gttacaggta aaatactata taatttctta tttctgcaac ttcaactgtg    360
caataactac acacatacac acacacacac acacacat gctgcaactg aatttcctag    420
ttaattaaaa agtgcatcaa agaatcctaa agaatttaag catynatgcc tgaggasaty    480
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cacttttctt actaatcctt taaacagatt wgaaaaagta gaaaagcatt atatattacc      540
aagcctaaat ccttttcatg tgccttttтc acttтttgca gaaagtagta gatggggaag      600
tcattттaaa gcttcattaa ggctaagaga cgactgtgct ctgaaagtgc agatagcagg      660
gcttcgtggg caggtgcgtg tgaatgagca accttattca gctgttgwtt gtggaggtag      720
aaatgaagct ctggtgatca accagcaggg ctcatcaagc ctctccgcct ggcttatgcc      780
tgcccaaact cgctgcctgc tactgtcttt aaatgcagca ataagttgct tctgtatcac      840
atcttctctt ctgcttcccc ttcttcatgt aaatagttca ttcacaccca cgttttgtca      900
ctctcccatt taaatgcagg ctttacaamt cataatcatc tcctcttttt gttgtcctcg      960
tccccgcctt gtcatcccac catctcacct tatgacaaac atggcgtctc tctaccttа     1020
ggatcactgt gaaagaggtg gcaatgatca aaaacagaca ccactcacag gagttgctgc     1080
tgtggtggat tagatgccct tttaccagct agtgcaaaac acctcagctg ccctttgctc     1140
tggagtgttg ccctgggcct ccagggggtc tccttgcytc cacgggacca atgtgtggta     1200
cagttggagc tccagggctc caccactgca gtacttgctg aactctttcc cctgccctgt     1260
cctctcattc cccttcttct ggagcatttc atccacagac cccttgccca agaatgtctg     1320
tctcagctct gcttctagag atcctccaag atgccatccc tcgtaaaacc tcaggcttcc     1380
aagacctgcc caacactcag ctatttтttc tcaggctgac gaagacagag taaagcatga     1440
aatagttттc aaattcaaag ctagagaggc attgagctcc ctgccttctt cctaccacct     1500
ccacccttaa gacctaaact gcttctagtt attacagctc ttaatttgta acttaggacc     1560
cataaattag cagcatgaga cctaagtgtg cttattaaga gttgctggtg tttaaaaatt     1620
gcagtctact tattggggca tttattacac taaaaaaaaa aaaaaaaac tcgag          1675

<210> 95
<211> 1205
<212> DNA
<213> Homo sapiens

<400> 95
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gccctggagt catacaccac cctgccctac cacctgcgga cccctgccct tcaaatccca      120
tcacacggcc tgcgtaccag ggcagcaacc caatcagtga catttgggct atccacgcgc      180
tgcggatcgt ggctaagtat ctgaagaggg ctgtcagaaa tcccgatgat cttgaagcaa      240
ggtctcatat gcacttggca agtgcttttg ctggcatcgg ctttggaaat gctggtgttc      300
atctgtgcca tggaatgtct tacccaattt caggtttagt gaagatgtat aaagcaaagg      360
attacaatgt ggatcaccca ctggtgcccc atggcctttc tgtggtgctc acgtccccag      420
cggtgttcac tttctcggcc cagatgtttc cagagcgaca cctggagatg gcagaaatac      480
tgggagccga cacccgcact gccaggatcc aagatgcagg gctggtgttg gcagacacgc      540
tccggaaatt cttattcgat ctggatgttg atgatggcct agcagctgtt ggttactcca      600
aagctgatat ccccgcacta gtgaaaggaa cgctgcccca ggaaagggtc accaagcttg      660
cacccgtcc ccagtcagaa gaggatctgg ctgctctgtt tgaagcttca atgaaactgt      720
attaattgtc attтtaactg aaagaattac cgctggccat tgtagtgctg agagcaagag      780
ctgatctagc tagggctttg tcttttcatc tttgtgcata acttacctgt taccagtata      840
ggtgggatat acatttatct tgcaggaaat tccccaaagc tcagagtcca gttccttcca      900
taaaacaggc tggacaaatg accactatgt tagacccca ggctcgactt caggggtcag      960
tgttcctgtc ccaaacccca cacagaatac tctgcctctg cttcatgtag caaatgagca     1020
aaaactcagt atctatcaaa agtgtaaatt atatttccta tgcctagtaa ttcacttcat     1080
gtctaaaaat ttatctgata gaaacactag caccagtaca tacagaagca tggcaaggat     1140
gtttctggca gcactтttct aataataaaa gatttgaaac aaaaaaaaaa aaaaaaaac     1200
tcgag                                                                 1205

<210> 96
<211> 484
<212> DNA
<213> Homo sapiens

<400> 96
ggcacgaggg gagacaataa tgagggactt tcagttттac tттacataat тттcttttaa       60
gtattggaat ttaggtgatt tттcctttgg ggtтттctgt attттccaat cacaataaat      120
aaaataagtt ataaatattt gttgcatgaa tgaaatgtat aaacccattt atgtatgtat      180
тттттaaaa ttagtatatt attaagtcta tacaatatta gtatattgtt atgtatgtat      240
aagctттта acatgaagtt tgcagaatat agtacttctt ccaaactcta tgacatgggg      300
ggaactgaag tatggggata tcttgtacca gtgtaagaat tcaagaagag accgtgtgtg      360
```

64

```
gtggctcatg cctatagtcc cagcactttg ggatgccaaa gcaggatgat ctccttggagc    420
taggcgttca agaccagcct gggcaacata tcaagacccc atctctaaaa aaaaaaaaaa    480
aaaa                                                                   484

<210> 97
<211> 1069
<212> DNA
<213> Homo sapiens

<400> 97
gtttaaaagt taccttgatg acagagtcat tgctatactt gcaacttatt ttattgtggg    60
ggatcagtga ataccctct agtaatactg agatgtatag aaaatgcccc taaactaaat    120
gcccccactg ttttaagtta aactgtattg ttggcctggg agcaagggta atgggtagtt    180
tttccttgta gttaagcttt gagctgtcat ttcttatttt agttattgta ctgcctatga    240
aggctcttct aattttttaaa ttcttaactc gttttggtga agtagatgaa caaccaagtt    300
tattgaagct ttaatcatag. ttgaacatgt aattgagtca ctgggatctg cataaaagtt    360
tgcagatyct gatatacagt ctttatagga gttagaatat gaagattgta gtagctattt    420
tcatcaccca tcagacttat atgtttattc agtagagctg aaattattaa atgtatgaat    480
attactggct ttttcctgac cattcacact tcatggtgat ttcacaagag aaggtatatg    540
attctggttt ccttgcagac ttgtttttta taatcacrtt tattgaggct taattttcat    600
acaataaatt ttatatatat tttaagttta caatttgcca ctcagatcaa gatacggaaa    660
attctcatct attggagaaa gtttcctcat acttctttgc agccatcctc ccsracctgc    720
cacttggccc aggcaatcac taatctaatt tttaacacta cagattagtt tgccacttca    780
tctaaataga aacatatttt atgtagttgt ttgtctggct tttttccttc aacaatgtct    840
gccaataata ttgcatttat tgaaagttac ttcattttta ttgctgagta gtaagtagtc    900
tattgtgtaa tggataccac agtttatcca ttcgtctgtg gatggacatt tggggttttt    960
acgcttttaa gttgcaatga acatgcatac aagtattgct gtgatcattg tttttccttc    1020
tcttgaataa ataactagaa gtggaaaaaa aaaaaaaaaa aaactcgag              1069

<210> 98
<211> 1475
<212> DNA
<213> Homo sapiens

<400> 98
cacaggccag gctccaccct ctagtaaagg ggaagaggct gctggttatg cccagragtc    60
tcaaagggag gaggccagct gagtaggcag cctggtgagg ggggcaggg gatgggcagg    120
agggtgggag agtggatgag gggcttctca ctgtacatag agtcactggc atgatgccct    180
cgctccccca tgcccccaca tcccagtggg gcataactag gggtcacggg agagcagtct    240
cgtctcctgt gtgtatgtgt gtgagtggtg ggcaggccag tggcagggcc ggccccagcc    300
cctgcatgga ttccttgtgg cttttctgtc ttttgctagc ttcaccagtt tctgttcctt    360
gtgggatgct gctctaggga tactcagggg gctcctgctc tccttcccct tcccttcttg    420
cctcaccatt cccctaggca ggccctgcag gtcccacact ctcccaggcc ctaaacttgg    480
gcggccttgc cctgagagct ggtcctccag cgaggccctg tcagcggtct taggctcctg    540
cacatgaagg tgtgtgcctg tggtgtgtgg gctgctctag gagcagatac aggctggtat    600
agaggatgca gaaaggtagg gcagtatgtt taagtccaga cttggcacat ggctagggat    660
actgctcact agctgtggag gtcctcagga gtggagagaa tgagtaggag ggcagaagct    720
tccatttttg tccttcctaa gaccctgtta tttgtgttat ttcctgcctt tccgagtcct    780
gcagtgggct gccctgtacc ctgaacctca tgagcctcta agggaaagga ggaacaatta    840
ggacgtggca atgagacctg gcagggcaga gtacaagccc agcacccagt gtcccagcct    900
tactgggtcc ttaccctggg ccaaacaggg agggctgata cctccttgct cttcctagat    960
gcccacctcc tacaatctca gcccacaagt cctctccacc ctaggggct tgctgcatgg    1020
caataactca taatctgatt tggaggtttg ccctttacag gggcagattt tctgctcagt    1080
tcaacaatga aatgaagagg aactccctct ttctacagct cacttctatc agaggcccag    1140
gtgcctcaga gccacattga gttgcttttt ctgggatgag gaagtagggt taaactcccc    1200
agtttcctga gggaggctcc tgacaggtgc cctttgtcag accctaccac agcctggata    1260
ggcagccaca ttggtcctcg cccttgctcg gcactccgtg gtggtcctgc ccttctccct    1320
gcatgcctgt gggtctgctc tggtgtgtga aggtcggtgg gttaactgtg tgcctactga    1380
acctggcaaa taaacatcac cctgcaaagc caaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                              1475
```

65

<210> 99
<211> 1475
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1292)
<223> n equals a,t,g, or c

<400> 99
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cacaggccag gctccaccct ctagtaaagg ggaagaggct gctggttatg cccagragtc      60
tcaaagggag gaggccagct gagtaggcag cctggtgagg gggggcaggg gatgggcagg     120
agggtgggag agtggatgag gggcttctca ctgtacatag agtcactggc atgatgccct     180
cgctccccca tgcccccaca tcccagtggg gcataactag gggtcacggg agagcagtct     240
cgtctcctgt gtgtatgtgt gtgagtggtg ggcaggccag tggcagggcc ggccccagcc     300
cctgcatgga ttccttgtgg cttttctgtc ttttgctagc ttcaccagtt tctgttcctt     360
gtgggatgct gctctaggga tactcagggg gctcctgctc tccttcccct tcccttcttg     420
cctcaccatt cccctaggca ggccctgcag gtcccacact ctcccaggcc ctaaacttgg     480
gcggccttgc cctgagagct ggtcctccag cgaggccctg tcagcggtct taggctcctg     540
cacatgaagg tgtgtgcctg tggtgtgtgg gctgctctag gagcagatac aggctggtat     600
agaggatgca gaaaggtagg gcagtatgtt taagtccaga cttggcacat ggctagggat     660
actgctcact agctgtggag gtcctcagga gtggagagaa tgagtaggag ggcagaagct     720
tccatttttg tccttcctaa gaccctgtta tttgtgttat ttcctgcctt tccgagtcct     780
gcagtgggct gccctgtacc ctgaacctca tgagcctcta agggaaagga ggaacaatta     840
ggacgtggca atgagacctg gcagggcaga gtacaagccc agcacccagt gtcccagcct     900
tactgggtcc ttaccctggg ccaaacaggg agggctgata cctccttgct cttcctagat     960
gcccacctcc tacaatctca gcccacaagt cctctccacc ctaggggggct tgctgcatgg    1020
caataactca taatctgatt tggaggtttg ccctttacag gggcagattt tctgctcagt    1080
tcaacaatga aatgaagagg aactccctct ttctacagct cacttctatc agaggcccag    1140
gtgcctcaga gccacattga gttgctttttt ctgggatgag gaagtagggt taaactcccc    1200
agtttcctga gggaggctcc tgacaggtgc cctttgtcag accctaccac agcctggata    1260
ggcagccaca ttggtcctcg cccttgctcg gnactccgtg gtggtcctgc ccttctccct    1320
gcatgcctgt gggtctgctc tggtgtgtga aggtcggtgg gttaactgtg tgcctactga    1380
acctggcaaa taaacatcac cctgcaaagc caaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                               1475
```

<210> 100
<211> 1067
<212> DNA
<213> Homo sapiens

<400> 100
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ggcacgagct gaatgagggt tttgattttg aatgtttcaa tgttttgag aagccttgct      60
tacattttat ggtgtagtca ttggaaatgg aaaaatggca ttatatatat tatatatata     120
aatatatatt atacatactc tccttacttt atttcagtta ccatccccat agaatttgac     180
aagaattgct atgactgaaa ggttttcgag tcctaattaa aactttattt atggcagtat     240
tcataattag cctgaaatgc attctgtagg taatctctga gtttctggaa tattttctta     300
gactttttgg atgtgcagca gcttacatgt ctgaagttac ttgaaggcat cacttttaag     360
aaagcttaca gttgggccct gtaccatccc aagtcctttg tagctcctct tgaacatgtt     420
tgccatactt ttaaaagggt agttgaataa atagcatcac cattctttgc tgtggcacag     480
gttataaact taagtggagt ttaccggcag catcaaatgt ttcagcttta aaaaataaaa     540
gtagggtaca agtttaatgt ttagttctag aaattttgtg caatatgttc ataacgatgg     600
ctgtggttgc cacaaagtgc ctcgtttacc tttaaatact gttaatgtgt catgcatgca     660
gatggaaggg gtggaactgt gcactaaagt gggggcttta actgtagtat ttggcagagt     720
tgccttctac ctgccagttc aaaagttcaa cctgttttca tatagaatat atatactaaa     780
aaatttcagt ctgttaaaca gccttactct gattcagcct cttcagatac tcttgtgctg     840
tgcagcagtg gctctgtgtg taaatgctat gcactgagga tacacaaaaa taccaatatg     900
atgtgtacag gataatgcct catcccaatc agatgtccat ttgttattgt gtttgttaac     960
aacccttttat ctcttagtgt tataaactcc acttaaaact gattaaagtc tcattcttgt    1020
caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                   1067
```
```
66
```

<210> 101
<211> 1844
<212> DNA
<213> Homo sapiens

<400> 101
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gactaactgt aataaatgta tgacattatt ttgattgata cattaaaaaa gagttttag        60
aacaaatatg gcatttagct ttattattta tttgctttta agaaatattc tttgtggaat       120
tgttgaataa actataaaat attattttgt attgcagctt taaagtggca cactccataa       180
taatctactt actagaaata gtggtgctac cacaaaaaat gttaaccatc agtaccattg       240
tttgggagaa agaaacagat caagaatgca tattattcag tgaccgcttt cctagagtta       300
aaataccctcc tctttgtaag gtttgtaggt aaattgaggt ataaactatg gatgaaccaa      360
ataattagtt caaagtgttg tcatgattcc aaatttgtgg agtctggtgt ttttaccata       420
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agagactttc ttgagtgaca tttttaaata gaggaggtat tcactatgtt tttctgtatc       540
acagcagcat tcctagtcct taggccctcg gacagagtga aatcatgagt atttatgagt       600
tcaatattgt caaataaggc tacagtattt gctttttgt gtgaatgtat tgcatataat        660
gttcaagtag atgattttac atttatggac atataaaatg tctgattacc ccatttatc        720
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ttttaatcta taacaatttg tgttagctgt tcatttcagg attatatttt ctacaagttc       840
cacttgtggg actccttttg ttgcccctat tttttttaa agaaggaaga aagaaaaata        900
agtagcagtt taaaaatgag aatggagaga aaagaaaaag aatgaaaagg aaaggcagta       960
aagagggaaa aaaaggaag gatggaagga atgaaggaag gaagggagga aggggagaag       1020
gtaggaagaa agaaaggatg agagggaagg aagaatcaga gtattagggt agttaactta      1080
cacatttgca ttcttagttt aactgcaagt ggtgtaacta tgtttttcaa tgatcgcatt      1140
tgaaacataa gtcctattat accattaagt tcctattatg cagcaattat ataataaaaa      1200
gtactgccca agttatagta atgtgggtgt ttttgagaca ctaaaagatt tgagagggag      1260
aatttcaaac ttaaagccac ttttgggggg tttataactt aactgaaaaa ttaatgcttc      1320
atcataacat ttaagctata tctagaaagt agactggaga actgagaaaa ttacccaggt      1380
aattcaggga aaaaaaaaaa tatatatata tataaatacc cctacatttg aagtcagaaa      1440
actctgaaaa actgaattat caaagtcaat catctataat gatcaaattt actgaacaat      1500
tgttaattta tccattgtgc ttagctttgt gacacagcca aaagttacct atttaatctt      1560
ttcaataaaa attgtttttt gaaatccaga aatgatttaa aaagaggtca ggttttttaac      1620
tatttattga agtatgtgga tgtacagtat ttcaatagat atgaatatga ataaatggta      1680
tgccttaaga ttctttgaat atgtatttac tttaaagact ggaaaaagct cttcctgtct      1740
tttagtaaaa catccatatt tcataacctg atgtaaaata tgttgtactg tttacaatag      1800
gtgaatataa actcagttta tcaattaaaa aaaaaaaaaa aaaa                       1844
```

<210> 102
<211> 2122
<212> DNA
<213> Homo sapiens

<400> 102
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ggcacgaggg agatcagtgt gaagggcatt gccaaagtgg aatcagtaag gcttggcagt        60
tgaccttgtt tgttggagag aagggataag attttaaagc tacatgtctg aaagaatgat       120
gctgctgatt gaaataaagg aagaaaggat gcattcgggg ctccaacctg tcctaggaag       180
gcctagacct caaacaccaa cacctccatg catttcctct ttggctacta tgtcttttcc       240
ctgacttctg cctctccagc tctctgggct gctgcttcca cctgttcatc tgacttagac       300
sctccctgct gggtccttgt tcacctactc atttggtgct tcgtctgcca tcagtacctc       360
cattgcagct ggtgggatgt cagtcaccat ctcttatatt tgcttcccac tagaaagatc       420
aagagaagtt atttctttcc cttgcgctcc aattttctc tagacagttg gtatccacaa        480
ttttaaaaaa tgttccatgt tgtataaaca agcattcgct gagagggggct gttaatacac       540
atcgtgcccc ttttataaaa attcatgcat ggaatcctac attattatgc atcaaaatct       600
ccagaaatgt cttaggattt ttgcagggag wwtwttaaat gcattgtttt gctttgtttt       660
gaagagacta gatgtgcaga ggaagagagg tggcatggtg ggagggtaca tttgagttgt       720
caacagtctc tgcagtgtca ggtcaattac atcagcactt ggactggacc agggaaagga       780
atgattctgc ttcctgggaa tgtcagaagg acctgatgat tatatttggc aaagccagga       840
ggagtggctt tgaatgtcat tgctaagaat tacactttga gtagcatttc tggatgtctg       900
agcttttcaa atgatacttc ttttctgctg tggctttcct ttctgttgga ctggttccca       960
```
```
67
```

```
gagggtcctc ttgtttgtcc ttgccctcgc ttttatatca gttcatgttt tctcttctgt    1020
catcttcctt cccagcgctg tttctccacc ccctcctgct gcactcacaa cagcttcccc    1080
tctcctgttt agaggtggaa gcatgtaaga atgcgtttga gggggatgct tgccaaagga    1140
cagcatattc aacatctggt atcaacaagg taatgtttaa ccttagacta gccaaactag    1200
tgatgacctg cttccatgct gcatctgctg cttttgtgt tgatgggact cagaaatcat    1260
gagaaaggtc ttcagtgatc catgactgca acaaattctt ttcctaattg tgccgtatat    1320
tatgcccctc aatacaactt actaatctct gcctcagttt ctccatctgt gaaagtggtg    1380
taatacttat ctacctccct tgaatgttgt gaagattagt atatgttggt aaagcacttt    1440
taaaataaag aatgatataa agcaaaaaaa aaaaaaaaa aaactcgaga ctagttctcc    1500
tcgtgccgaa ttcggcacga gtgtcatcgg gctcacagct cagagacatc tgcatgtgat    1560
catctgcata gtcctctcct ctaacgggaa acacctcaga tttgcatata aaaagcacc    1620
ctggtgctga aatgaacccc tttcttgaac atcaaagctg tctcccacag ccttgggcag    1680
cagggtgcct cttagtggat gtgctgggtc caccctgagc cctgacatgt ggtggcagca    1740
ttgccagttg gtctgtgtgt ctgtgtagca gggacgattt cccagaaagc aattttcctt    1800
ttgaaatacg taattgttga gactaggcag tttcaaagtc agctgcatat agtagcaagt    1860
acaggactgt cttgtttttg gtgtccttgg aggtgctggg gtgagggttt cagtgggatc    1920
atttactctc acatgttgtc tgccttctgc ttctgtggac actgctttgt acttaattca    1980
gacagactgt gaatacacct tttttataaa tacctttcaa attcttggta agatataatt    2040
ttgatagctg attgcagatt ttctgtattt gtcagattaa taaagactgc atgaatccaa    2100
aaaaaaaaaa aaaaactcg ag                                              2122
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<210> 103
<211> 931
<212> DNA
<213> Homo sapiens

<400> 103
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ggcacgagct gcctcggcct cctgagtagc tgggattaca ggtgtgcgcc actacaccca     60
gctaattttt gtatttttat tagagacgtg gtttcaccat gtcagccagg atgttctcaa    120
tctcttgaca cgtgtctccc tccagcttct gcccttattt acctgcctgt tggctcttaa    180
aggcattttt ggttgagact tttgcatgta aaataagaac tttgccatct ttggattccc    240
ccatgtttgt ttgtttgttt ttaataaata atatttaata ttaaaaggag ctgtggtttt    300
tttctctcta aagagcagga aaggacagag actggtcgct ctctgcagtc acacttgarg    360
tgaagaaacc atgggataga attagcygtt agttgagtcc cyaggttcmg aggragaaag    420
aagaccatac cacctggtag ggagtgcgaa ggaggttcca gggactgatc catagaaggg    480
tktcagamca acttcmttaa twaaggaktg ccttaatttty cttggtcaag gggaaacttc    540
ctgtgtgcct ttctatcctg atgacacccc ctcactgaaa tcctggtgtt gtttccacag    600
agctgtctgg ccttttgtcc ttgatccttg gttaaggaaa tgaccaacca ggtaagacct    660
gtgttgaagg gaaaaacatc aattggtctc tttgccaagt tcaagtccag taggttttct    720
ggatgtgtag tcaagaaact agcatctcat tcttgcccgg ctcctaaaga gctgggtgac    780
cctgggtacc tagtcaccac agtgttaggt gggactagtg aaatgcaaat actgagagga    840
ggattggttc atccaagtct ttaccacaat ttagtgagta atagaagaag cttaaaagat    900
gttgtacaaa aaaaaaaaa aaaaactcga g                                    931
```

<210> 104
<211> 1683
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1680)
<223> n equals a,t,g, or c

<400> 104
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cctagctcat ctgggcggcg gcggcaastg gggacagggc gggtggcgca tcaccggcgc     60
ggaggcagga ggagcagtct cattgttccg ggagccgtca ccacagtagg tccctcggct    120
cagtcggccc agcccctctc agtcctcccc aacccccaca accgcccgcg gctctgagac    180
gcggcccegg cggcggcggc agcagctgca gcatcatctc caccctccag ccatggaaga    240
cctggaccag tctcctctgg tctcgtcctc ggacagccca ccccggccgc agcccgcgtt    300
caagtaccag ttcgtgaggg agcccgagga cgaggaggaa gaagaggagg aggaagagga    360
```

```
ggacgaggac gaagacctgg aggagctgga rgtgctggag aggaagcccg ccgccgggct    420
gtccgcggcc ccagtgccca ccgcccctgc cgccggcgcg cccctgatgg acttcggaaa    480
tgacttcgtg ccgccggcgc cccggggacc cctgccggcc gctccccccg tcgccccgga    540
gcggcagccg tcttgggacc cgagcccggt gtcgtcgacc gtgcccgcgc catccccgct    600
gtctgctgcc gcagtctcgc cctccaagct ccctgaggac gacgagcctc cggcccggcc    660
tcccctcct cccccggcca gcgtgagccc ccaggcagag cccgtgtgga ccccgccagc    720
cccggctccc gccgcgcccc cctccacccc ggccgcgccc aagcgcaggg gctcctcggg    780
ctcagtggtt gttgacctcc tgtactggag agacattaag aagactggag tggtgtttgg    840
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cattgccttg ccctgctct ctgtgaccat cagctttagg atatacaagg tgtgatcca    960
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tatatctgag gagttggttc agaagtacag taattctgct cttggtcatg tgaactgcac   1080
gataaaggaa ctcaggcgcc tcttcttagt tgatgattta gttgattctc tgaagctctc   1140
atttcactct tcagtgttcc tgttatttat gaacggcatc aggcacagat agatcattat   1200
ctaggacttg caaataagaa tgttaaagat gctatggcta aaatccaagc aaaaatccct   1260
ggattgaagc gcaaagctga atgaaaacgc ccaaaataat tagtaggagt tcatctttaa   1320
aggggatatt catttgatta tacgggggag ggtcagggaa gaacgaacct tgacgttgca   1380
gtgcagtttc acagatcgtt gttagatctt tatttttagc catgcactgt tgtgaggaaa   1440
aattacctgt cttgactgcc atgtgttcat catcttaagt attgtaagct gctatgtatg   1500
gatttaaacc gtaatcatat cttttccta tctgaggcac tggtggaata aaaaacctgt   1560
atattttact ttgttgcaga tagtcttgcc gcatcttggc aagttgcaga gatggtggag   1620
ctagaaaaaa aaaaaaaaaa aactcgagac tagcggcacg aggggggggcc cgtacccaan   1680
acg                                                                 1683
```

<210> 105
<211> 1270
<212> DNA
<213> Homo sapiens

<400> 105
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aggaattcgg cacgagcaga attcctttct catatttcaa gtgtccctgt gaattatgag     60
gggaaaaaaa tctttattaa agaaaaaagt gaaataaat atgcatggat acttggattt    120
ttcttttagt aacaaagata tttaaattat ttgtatacac acacacacac acacacacac    180
acacacacgt atctgtacct agaaatgttt atagggagg tcagttttct gaagattaaa    240
tgcagcccta atgtcagatt aatgttataa acacatcgtt taatcacaag ttttcagaga    300
gcaggctcca cagatagtct ctaactttct atcattacaa atcgctattt ttatatcatt    360
gctaatttaa ataataaagt aaattatgaa gaggaatcat tggttgcaag tcaccatggg    420
agtttagtcc ctgtgaaaat ataaagcatt taaataattt gtattctttt accattttt    480
attacatctc tttaattttt gtcacttgaa tatattagga tgatgatgat actataatca    540
ctggaacaaa gacatttgct tggacatctt ttcttttttc ccccattttt gttctgttaa    600
taatttttaa ctatagcttt tcctttcttg tccttatctg tcccttatcg atcatagata    660
gtttcactac tattttaag tttttattgt taaattgaag atgaatctgt acagttactt    720
gtgaattaag atgcagctaa gttaaaatca agtataattt tgaagctgat tttacattta    780
actagatgat taaatatatt ttttcaggtg cttcttcaat ttaaatcaag ttttatggtt    840
tcagcaaaat ttagaaaata tgtactttac ctaaaaactt ttcttttagt gctttggata    900
tatacagaag cttaaatgag tagagtatcc caaacatcca gatgcttctc aaaatagcat    960
ttccggccgg gcgcggtggc tcacgcctgt aatcccagca ctttgggagg ccgaggcggg   1020
cggatcacga ggtcaggaga tcgagaccat cccggctaaa acggtgaaac cccgtctcta   1080
ctaaaaatac aaaaaattag ccgggcgtag tggcgggcgc ctgtagtccc agctacttgg   1140
gaggctgagg caggagaata gcgtgaaccc gggaggcgga gcttgcagtg agccgagatc   1200
ccgccactgc actccagcct gggcgacaga gcgagactcc gtctcaaaaa aaaaaaaaaa   1260
aaaactcgag                                                          1270
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<210> 106
<211> 911
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (265)

69

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (327)
<223> n equals a,t,g, or c

<400> 106
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tggccgggat ggtcacgatc tcctgatctc atgatccgcc cgcctcagcc tcccaaagtg   120
ctgggattac aggcttgagc caccgcgccc ggcctgtcag atgctttttt gcatctgttg   180
tgatgatcat atggttttg cccttcactt tgcttgtatg gtttatcaca tttatagatt   240
tgtttatgtt gaaccaccct tgtantcctg ggataaatct cacttgatca tggtgaatgc   300
ttcttttatg ggctgttgaa ttggttngtt agtattttgk tgaggatttt kgcatattkg   360
ttcatcaggg atattgacct gtaattttct tgtagtgtcc ttgtctcgct ttggtatcag   420
ggtaatgccg acgtcgtaaa atgagtttgg aagtgtatct ggaagtattc gtcgtctttg   480
atttttggga agagtttgag aagaattggt actagtttta ccttaagtgt ttggcagaat   540
tcttctggtc tcttgatgtt ttcattgcct tgctgagcat agatccaggt acttatgagc   600
aaaattctac tcagtctgac aactctgctt agaattatga atgtgattaa atgcagtggt   660
cactctacct ttctaaggta gttcagctca agttacagcg atccagtcct gatagagctt   720
tgaaacctca agtctattat ataacgtaat gaaaaattgg cttggtgagg tggttcacac   780
ctataatccc agcactttgg gaggctgagg tgggtggatc acttgagttc ggagttcagg   840
accaggctgg gcaacatggc aaaaccccac ttctaccaaa aaaaaaaaa aaaaaaaaa   900
ctcgtgccga a   911

<210> 107
<211> 1697
<212> DNA
<213> Homo sapiens

<400> 107
ggaagaaaac aatgctggcc ccttcatcta aattctgaga attatttaac acttagtacc   60
caactctcaa gttgttatga agattaaatc acataatgtg atgttcccgg cacagtgctc   120
tgtaacatac tccggagcac atagtacctg cttaataagc attgcataag tatatgtgta   180
catgttgttt ttcagtgcag acttactcag acgttgttgc cttctcctgt ctctgaagtt   240
aaagagctag caaagaatgt ggtttttcag gatagagatc gattttttat ttgatcagaa   300
gtatttgtgt tgtgatgagt gatgagtgta agagtttgtt ccatgcctgc tttctctagc   360
taaatgctac taatgatggg tctggggaag ctacatcagc attgacagga gatgtgttta   420
aaatgcactt tcatggatgc ttttaaaacc tgcagawtca cattmcatag tgtaggscca   480
gggttaccaa atgatttata tgcacactga agtttgagag scaatgttta gctaagtggt   540
tcttggccca ggcttctaat taagattcca tggccaggtt gcagaaatct tttcacttgt   600
gcccttcccg caggctctgt atattggtgt gggtgggagc atccttgttg atataattaa   660
gtgcctcatg tgactccagg ttgaggccag ggtcaaacat gaggaattca aaatacattc   720
atgagagttg agttcaaact ttattccaaa gggaggtcca ttccaatggt tggatttggt   780
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caggaaaaga gaaagataaa ttttgatctt tgtggaggag ctcactgtcc ttgaatctca   900
cctgttataa agaacataaa tgagtggaca ttttctgcat gcctggatct ttctacctgt   960
gtttgtggtg gtagcaggtg aagagattgt gctgattcct ttaaaggcat attcccaaga   1020
tgcaggtgtg acttgtccag agaatatcac ctgagaataa atcctagaga aggacgatga   1080
agagaaaaat ggcttttttct caggtgactg tgtctcagac caggaacagt gttcactctg   1140
cctyctggaa tgccatatgt ttagaactta caaacctgta cttcttgact ttatgctgkt   1200
tctccctata agtttgktta aacactttt cttctcatga tagtcaaaca actctgaaaa   1260
aatattattt tctatacact agagtcttct cgacattctc ttcatcttgg cttcttctct   1320
gctatgcaga attctcatca ttaatttatg actcataata ttaaaaatat tccctttggc   1380
tgggcgcggt ggctcatgct tattatccca gcattttgag aggccgatgt gtgtggatga   1440
cctgaggtca ggagttcgag accagcctgg ccaacatggt gaaaccctgt cactactaaa   1500
aatagaaaaa atagctgggc atggtggtgg gtgcctgtaa tcccagctac ttgggaggct   1560
gaggcaagag aatcacttga acccaggagg tggaggttct ggaggttgca gtgagcctac   1620
atcgtgccgc tgcactccag cctgggcaac agagagagac tccatctcca aagaaaaaaa   1680
aaaaaaaaaa aactcga   1697

70

<210> 108
<211> 1142
<212> DNA
<213> Homo sapiens

<400> 108

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gaggcaatag gtcggggaag gtgatgaatg ttctgtgggg catgtcaaat tgggtggaac      60
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gtgtgatggt ggtgagggct ggttgaaacc ctggggagta tgtggagctc atctgtgttt     180
ccacagagct tatctcccag gagatagcca tcgggagtgc cttgcctggc atgttcccct     240
gctgaggtct gttacccagg agcctgcaga cacaaagagc aggctggtaa tgctgagaag     300
cgaacattca gtacctgtca ccagaaccca gcatgggtgt tcaacactat ctggtgactc     360
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catgctcaca tatgccttta tgaatactgg aatctctaaa cctaccatca tgcatctcgt     540
cttagcttcc tacctctctc tttctacccc tgcaacagcc atgttattgc cagtaacaca     600
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agacaggctc tgggstctct ggtctgacca ctaatagcat cttctcctcc cgctaggctg     780
accagcctcc aaggcaggac tctgacacca gggttataaa tgcatctgtc tgggcacatt     840
atctaaattg ttatgtatca ccctgggtaa tggcaaaagt aaaaaccgct gttagctcag     900
tgaataaatc cttggtgctg atcaatcatt gcacgacata gactctttta ataggcacaa     960
tttacacaga ggcttggcag actgcttcgt cttctaattg ctgatggaaa atggatgccg    1020
agctctgctg tgccgtaaaa atgtaaacta taaatgactt aaaaacttgt gtgctccctt    1080
ctccacccag cactcatttt aacctttttat ttagaaacaa aaaaaaaaaa aaaaactcg    1140
ag                                                                   1142
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<210> 109
<211> 976
<212> DNA
<213> Homo sapiens

<400> 109

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caaaaggtga gaaagacgtc atccgccttt ttttaatcca tttcttttgc caccctatat      60
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agccatctag cccacctccc tcaattccct atgtgaggaa gcaaaacccc agggaagcca     180
aagggctcct gtccaccctg acaccacagg ccggggggaga gtagggactc tacccccctc     240
tccccttgta ggtgacacat gctctgccct ctgaggcagt cagcgaaggc aaatggtctg     300
acttctttat gtggtcaaca ttttgataga atttctttat aatttgatag agattatatt     360
attttattt tattttgagt gggaagaatt ttaaaacctt tttatgtcaa ttaccatctt     420
gtttctttca cctttgaaac aatgatttgt agcagagatg acattgtagc aacccagaat     480
tatgcttttg gaatgtggtc ctcactgtac aggagaatgt gtaatctttt gttaaaattc     540
ccagtgtgca tacattttct ggttcctcgg tccagttgct aaagttctta gtattttagc     600
ctaacatatt tatcaccaac ttttctttaa aagtgttcct tttgtcactt agttactgat     660
tttcctgggt ttgacataag tattctatga gatgatatat atgctttttt tgaaagctga     720
ttctcatgaa ttcaagtagc tgagttcctt tatgtttcgt ttattcacta aagtagctga     780
cacaaaacac accaaaacct agagcggtag ttttatgtaa atgctcatga gtttgtatca     840
ataatataat tgttgatcca cttataattc gtgcaatact gtatgtatgt agagattgag     900
ttgtcaatta aaaaaaatgt ggcctctttg tgatcataaa aaaaaaaaa aaaaaaaaa     960
aaaaaaaaa aaaaa                                                      976
```

<210> 110
<211> 658
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (565)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (571)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (589)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (596)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (621)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (643)
<223> n equals a,t,g, or c

<400> 110
ttcggcacga gtatacacaa cattttgttt ttttttttgca aatactctac tgaatatttc   60
cccattctat ttaatatatt atgatctttc atactttatg aaactctaaa actgtaaaat   120
aatttttggg agggagagaa gagttctatt gcaaaaaaaa atgctttatg cacataattt   180
ttttatgcta aacaatttcc ttggaataaa cttgcaggca tggacatcta gattaagtwt   240
gcaatttctt ttgacatttg ctacatattg ctatgctaat ttccaaaaga actgtactca   300
gtaagacaat tacacatttc agcctccgca ctgtaactct gtcagcattt gtgtgtgcac   360
acataattac acatagagtt gacacagaca ttttgccaag ataaaaaaaa aaaaaaaaaa   420
aactcgaggg ggggcccggt acccaattcg ccctatagtg agtcgtatta caattcactg   480
gccgtcgttt tacaacgtcg tgactgggaa aaccctggcg ttacccaact taatcgcctt   540
gcagcacatc ccccttttcgc cagcnggcgt naatagcgaa gaggcccgna ccgatngccc   600
ttcccaacag ttgcgcacct ngaaatggcg aatggcaaat tgnaagcgtt aaaaattt   658

<210> 111
<211> 1588
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (380)
<223> n equals a,t,g, or c

<400> 111
cttattttca aatttgacat tatcatcctt gcctcttaaa aagatagatt ttaattgttt   60
tcatacttca tagaaatcaa agtctgtgtt tgctacaaat tgaatgctca cgttacctga   120
aataatactt tggactgcag gacaggacag tattgattcc taagtagatt gactataatc   180
tcatgataag tatgtatatg tgcatgggaa aacaacattc aataatagtc tttgtgttta   240
aaactatcat ggtatacatt ttcttatgtg gtgcttgagg agtttcattc tacagtttac   300
aaggtgtagk tttgcacccc aaattctcar ggtatgctat ttcacccaaa tacttgaaag   360
aaaaaggtgc cctgtatttn atcagtactg ttgaggggga aattttttgt gtaagtttgt   420
ttgataaaac tgcttataaa aatcaaattc acaaaatatg ttaggctttc acataatttc   480
taaggagata tatgtagaaa taagatatat attatcaaga gactgcttat atattcttaa   540
ctagcttctg ggtcctaagt agacctcaca ggtgcataaa atcattaata aagcatgtag   600
cacttgctaa ttggtgcctt aagcttgaat ctaatcagaa ttgcagactc gggtcctctg   660
ggaaaaaaac atgtccgtct gtggcacgtg tgagtactag gcccagggga agagtctgaa   720

72

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aattgaattc ttttgtgtgt cctgtgtctc agaagagaac tgaatgttca gagcagcgtt    780
tgtaagctat taacattcag tatttcgtgt tgcaactaga acacattatt agatttattc    840
ctgtttaatt cataatggtg cmgawtaaam cacacacatc tgatttgatt ycttttyctt    900
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gctccctgaa taatctacca tacctgtatc catagcaggt gatgcttttt tttatcccca   1020
ctttgaagac gtgtgtttct gtatttacac ataaatcata ctattgtata ttaargmcag   1080
cagtggttga aargaakgtg aacactgtag aagttatgtt ggaaaaaagg agagtaaatt   1140
gtgtgattaa tggggaagga tattggataa tgttataccc cggactatga aaaaagctgg   1200
tggtaaatgg gaagaatgtg aaattttaaa ctgctctcaa cgtaggaatc ttggtggaaa   1260
agttcctacc tgaggtctga tatgattcaa ttatagaatg caatgagctt ggccaagggg   1320
actttgaatc cagccaagga aactttgaat ctcgacagct ctgagaatca cattttcagt   1380
gcattgaata tggagtaaac tatttagaca aggattctgt gagactaggc tacttacctt   1440
taattgccag catttgtaaa tgattgtgca atcttgtgta atggtctttt attttgactg   1500
ttttggaaaa aaaatgtttt attgttttt tttcccagta aaaattactt caaagaaaac   1560
gtaaaaaaaa aaaaaaaaa aactcgag                                        1588
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<210> 112
<211> 593
<212> DNA
<213> Homo sapiens

<400> 112
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ggcacgagcg cgatagccag ccgcggctgc ccttgcgctt cccgagctgg cggggtccgt     60
ggtgcgggat cgagattgcg ggctatggcg ccgaagtttt tcgtcagtac tgggatatcc    120
ccgatggcac cgattgccac cgcaaagcct acagcaccac cagtattgcc agcgtcgctg    180
cctgaccgcc gctgcctaca gagtcacact caatcctccg ggcaccttcc ttgaaggagt    240
ggctaaggtt ggacaataca cgttcactgc agctgctgtc ggggccgtgt ttggcctcac    300
cacctgcatc agcgcccatg tccgcgagaa gcccgacgac cccctgaact acttcctcgg    360
tggctgcgcc ggaggcctga ctctgggagc acgcacgcac aactacggga ttggcgccgc    420
cgcctgcgtg tactttggca tagcggcctc cctggtcaag atgggccggc tggagggctg    480
ggaggtgttt gcaaaaccca aggtgtgagc cctgtgcctg ccgggacctc cagcctgcag    540
aatgcgtcca gaaataaatt ctgtgtctgt gtgtgaaaaa aaaaaaaaaa aaa            593
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<210> 113
<211> 2355
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (766)
<223> n equals a,t,g, or c

<400> 113
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ggcacgagcc cctctctaaa tattggtatt tttatattcc agagatgtac ccaatagaaa     60
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tcacgtacag tgggctatgt ggatgtcact tgtgcttcac catagtttac cactaggtgt    180
cactgtggct ctgcactgcg cttgttttgt agcaaagaac agcggcatcc cctcgggaga    240
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gttcctctca gcctccagct tttataactc cagaagcgtc acagttgggt ggtttgattc    540
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ctgtgcggtc ctgctgctcg ctcactggga ggtgcagctc tttctcctct tcctctagga    840
attccagacc gaccatctac catgactaac aacaatgaac aaagggctta ggggcaagag    900
ctacctgcaa agacgtgtca tggaaccctt caccatgcaa tgccttgaac tcagctctgg    960
ctgctcccaa gaaaaggtgg ctggctgggg gcctggacac aagcacaatg gggctggtgg   1020
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                                    73
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agccactgtg cagagctact tgaataatca ctgggttttc atcaactcct tttgtcatac   1080
agaccactca agggctgaag tgttggtaac cttcatttcg gtgtccaaag cctcacagca   1140
ggtgagccac cctgagatgc ttgtggccac atggtggcca cagtcagagc tttgaaagtc   1200
agtaccaaat gaacgcataa ttggacacca aaaatcaagt gttactttca tgtttcctca   1260
ccccatcatc tcattgcctc ctgctgactc tgataccgac gctgagctga cttgccaggc   1320
tgccgctgga cgcgtagaga tcaggccagc gccgcgctca tttttccagg tagacctact   1380
ctgtggaacg gaagtgccct agctgctttg tttttgtagc acttgctggc tgaatttttc   1440
ttttgctaat cgctaaccag aaagtctggt tagaggggc tcaactcaat cccttggtc     1500
cccagcgcca gacaagagtt aattctggaa aattcagtac ttgaatgtac ctgccttatt   1560
gcataccaat ttactggggg gaaaaaaaaa gttaagagat gccggctcca gatctccact   1620
tcattcacag gtgatttgg aaatcctgta agttacactt cctgttctgg ttttgtttg    1680
ttttttgttt cctttggctg attcctgctg agtgaggcca gttcctcatc aggctcaggg   1740
caggtgcctt ttcaggcgtg gcctcctttc catctagcac agcatctttg tctctgttct   1800
gtctcctcca aatccaagat gattttaatt agtacagaca tgtacagtct acaattaaag   1860
agtgatttgt actaatatga ttttgattct tcctcctctt tgctgtcctt tcaagacact   1920
tgctggaaaa agctttaatg cacttagttt tcctttaggt tttctatgac tcagatgtaa   1980
aggactttct ctgtacagta tattatccaa tgcatgtttg ttctctctcc tgatatattg   2040
aacaccacac agttgtgaag ccgtgcagtg gggatgcccc acaccccaca gaggcatcta   2100
cccctgtgta taaggaaaga cattttcctt tgctgtactt gcttgagcag ttttattgtc   2160
tgtacatgtg agctgtgtga gatagatgtg aaaagttcaa atgaatgcat tttcctgccc   2220
catgtataca gattgtcatc tgtacaagga actgtatgta tgaaagcaaa tgtacttatt   2280
tataaatggc taacacttgg aaaaaaaaaa aaaaaaacc ccgggggggg ggccccggta    2340
ccccatttcg gccct                                                    2355
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<210> 114
<211> 1437
<212> DNA
<213> Homo sapiens

<400> 114
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ggcacgagaa atattcttcc tgaggttaat ggaacataat tttccacagc caatagcatt     60
caatagtcaa gactgctttt aatgattttc cagtgcgtgc cgcttcttaa tttgcaaata   120
tggtggatgt tataattata taaccaatat gtatgtatta gttaaacaga tattggaggg   180
ataactaggg aatctaacct taacctctaa taccatgaga aaatcaattg caaattaagt   240
tctgagatag aagctgtttg caaatctgta tatggagaga gcaacatgaa aacacaaaat   300
cactgtattt tttgcattgt tatttattt tctacttcag tgccaccttt aatttggtcg    360
tggcagtgtg tttccgtcca ttctttattt taaatagaga agtcatttat ttggctcatg   420
gttctggagg ctgagcagtc caagatgtag tggctgcatc tggtgagggc ctttgtgctg   480
caccatagca tggcagaagg gccagcaagc ccacgagaca gagaaaatgg gagccaaact   540
tacccttttg tcaggaaccc actcccttga taactaacac gctcctatga tagtggtatt   600
aatccagtca taagggctct gctctcaaga tctaatcacc tcttaaaggc ccaacctccc   660
aacctccttt ttggcctgtc ttttgtgtgt gcaggcgcat gtgtgcaaat aaaatcacat   720
caggttaagc ttgtcaaagt agggagcagc tggctttaag ataaactctc tcatccacac   780
atattttccc caccccaagc acagctgcct cttaactgct gttggaccat aactccaagt   840
gaagtggtcc tccctccccc atctccacaa atagcaggaa agtaatgtt gtaatttaca    900
aagttactta ctccctgcca tttcagagag aagatggagt ataggaaagc cctcccaccc   960
actgtccttg tgtgatgtga cacaacttgc tccctcagtc ttggaataca gcctcatgtg   1020
gtccttggcc agaggcagag aaagggcctt catctctctc acagctgaag ggtgggaaac   1080
atggtcttca ttccgtgtaa ccacgtgctc agctagagat cagaggttct gctcataaat   1140
tataaaggag aagagagatt tggggatgat tagcagcctc tgacataggg gcatctcccc   1200
cagtgaggcg tgggcagatt attaaaggaa tggtactggg aataaaagtg gctgaggata   1260
aattttaaat tctcatatta cttcttacaa aaattctaag ttttaaatca agtcgtataa   1320
ttttttaagaa taggtcttca attgatttct agatggcaaa taatttatat aaacaaaaac   1380
aatggagcct tctccaaaaa tgaatactca attaaaaaaa aaaaaaaaa actcgag       1437
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<210> 115
<211> 2050
<212> DNA
<213> Homo sapiens

<220>
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<400> 115

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ggcacgaggg aatttgactg gggagggatg tacagtgagc atcagttgtt acctatgatc    60
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gtgtgtgtgt gtgtgtgagt taccctctaa aaaaaggact ttacaataaa tctgcctctc   180
actggttatt gtaagagtgt atgtgatgca ctgagaagtc atttctgaag atacgtgggg   240
cgctctttgt agagaagtga aaataacatt cactatgaca atagctaaca tttatcgagc   300
ccttaccata tgccaggcac tcgggcaagc atttgcaggc ttttctcatt gattcctcac   360
aatcagccta ggatacagat gctgcctatt agtctcattt tatggctgag gaagcagagg   420
ctcagagggg ttaagtcatt tgcccaaggc cacacagcta gtatatgata gagtcagggt   480
tcaagcatat ggagcaaaac aggacttgtt tcctatggtt taagcattcc ctacatagtg   540
atctctcact gtcataatta catgcctact atgttctctt cagtaaagat ctcttatttt   600
tagttgacta gaggaagggc aatatgagca gaaaattttt cttgttttgg ggatgaggtc   660
tcactctttt tccaaggctg gagtgtagtt gtgcgatcat agctcagtgt agcctggaat   720
tcttggactc aagcaatcct gctgcttcat cctcccaagt agctggaact acaagtgtgc   780
accatcacat ctaactaatt tttsymgaga tggggtctgg ctatgttgcc caagctgatc   840
tggagctcct ggcttcaagc aatcctcctg ccttggcctc ccaaactgtt gggattacag   900
tgtgagcctg gaaaatattt gctaaaatat taaaaaataa agttttattt cttcccactt   960
cacgaaggkt atatttggaa ttaagacagt gtgttcttta atagtatttt tcatagtaat  1020
tgatttgatg agtaggcaag aatgatttgk gataagttaa aatgtcttag ataagtgtat  1080
gattaaaaaa tagctcatcc gggtgtggtg gctcatgctt gtaatctcag aactttggga  1140
ggccgaggtg ggcggnattc acttgaggta agtagttcga gaccagtctg gccaacgtgg  1200
tgaaacccat ctctactaag aagataaaaa ttagctgggc atggcacctg tagtcccagc  1260
tactcaggag gctgaggcag gagaggcaag agaatcactt gaacccggga ggcagaggtt  1320
gcagtgagcc gagatcgcac cactgcactc cagcgtgagc gacagagcaa gactctatct  1380
caaaacarca acaacaacaa aaacctcttg aaaattctta ctactttatc tgttggctga  1440
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taataaagtt caatggggtt cttctcatat ggagtgtaca taaaacactg tgagggccca  1560
gaacagcaaa acgtgcttaa aggtggacat gggatctgct tcagggtatc tgctgaggkt  1620
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tgagacagct tgcattaaaa gtcaaaccaa gaaaacccaa atggccactt ggctttctgt  1800
ggtgtttggg aaggcagttt gaggagtggt ctgtgaagtc cctgggcagg agggctcggg  1860
ctgagggctc agctgtggca cccccagatg actgctgagg tcatgaagga gctcatagca  1920
ccattcatgt ttctggactc agtcattgtg cctggggtcc ccatagcaag gaaagtaggg  1980
aagtgaacca aggtccagcc agtgttgctc ttggctgcag ggaaggaaaa aaaaaaaaa   2040
aaaactcgag                                                         2050
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<210> 116
<211> 1968
<212> DNA
<213> Homo sapiens

<400> 116

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gcggccagaa acccggctcc gagcggcggc ggccgggctt ccgctgcccg tgagctaagg   120
acggtccgct ccctctagcc agctccgaat cctgatccag gcggggggcca ggggcccytc   180
gcctcccctc tgaggaccga agatgagctt cctcttcagc agccgctctt ctaaaacatt   240
caaaccaaag aagaatatcc ctgaaggatc tcatcagtat gaactcttaa aacatgcaga   300
agcaactcta ggaagtggga atctgagaca agctgttatg ttgcctgagg gagaggatct   360
caatgaatgg attgctgtga acactgtgga tttctttaac cagatcaaca tgttatatgg   420
aactattaca gaattctgca ctgaagcaag ctgtccagtc atgtctgcag gtccgagata   480
tgaatatcac tgggcagatg gtactaatat taaaaagcca atcaaatgtt ctgcaccaaa   540
atacattgac tatttgatga cttgggttca agatcagctt gatgatgaaa ctcttttttcc   600
ttctaagatt ggtgtcccat ttcccaaaaa ctttatgtct gtggcaaaga ctattctaaa   660
gcgtctgttc agggtttatg cccatatttta tcaccagcac tttgattctg tgatgcagct   720
gcaagaggag gcccacctca acacctcctt taagcacttt attttctttg ttcaggagtt   780
taatctgatt gataggcgtg agctggcacc tcttcaagaa ttaatagaga aacttggatc   840
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aaaagacaga taaatgtttc ttctagaaca cagttacccc cttgcttcat ctattgctag      900
aactatctca ttgctatctg ttatagacta gtgatacaaa ctttaagaaa acaggataaa      960
aagataccca ttgcctgtgt ctactgataa aattatccca aaggtaggtt ggtgtgatag     1020
tttccgagta agaccttaag gacacagcca aatcttaagt actgtgtgac cactcttgtt     1080
gttatacat agtcatactt ggttgtaata tgtgatggtt aacctgtagc ttataaattt      1140
acttattatt cttttactca tttactcagt catttcttta caagaaaatg attgaatctg     1200
ttttaggtga cagcacaatg gacattaaga atttccatca ataatttatg aataagtttc     1260
cagaacaaat ttcctaataa cacaatcaga ttggttttat tcttttattt tacgaataaa     1320
aaatgtattt ttcagtatcc ttgagattta gaacatctgt gtcacttcag ataacatttt     1380
agtttcaagt ttgtatggta gtgttttat agataagata cgtctatttt ttcaaaattc      1440
atgattgcag tttaaatcat catatgacgt gtgggtggga gcaaccaaag ttatttttac     1500
agggactta tttttttgatc tttatttgag attgttttca tatctatcta aattattagg     1560
agtgtgtgta tcagaagtaa ttttttaatg tcttctaagg atggtcttcc aggcttttaa     1620
actgaaaagc ttaattcaga tagtagcttt tggctgagaa aaggaatcca aaatattaat     1680
aaatttagat ctcaaaacca ctattttat tatttcatta tttttcagag gccttaaaat      1740
tctggataag agaatggagg raaatactca gagtacttga ttawtttawt tccttttatt     1800
aaaaaattac ttctatgttt ttattgtctc ttgagcctta gttaagagta gtgtagaaat     1860
gcatgaactt matcctaata aggataaaac ttaaggaaaa ccacaataaa ccatgaaggt     1920
gtacacatct taaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaa                      1968


<210> 117
<211> 754
<212> DNA
<213> Homo sapiens


<400> 117
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gtgatttggg aataaacttg gtgtgatgga ggaatggcag agagggcaga acagagcaag      120
agggcaagat ttgtaggaga tgaggtcatc aggggcctgg caggccatgg tgggggtgtg      180
gattctattt ttaagtgctg tggaaagtca aggcagggtt ttagcagagc aaagatgcaa      240
cctggcttgg gctttataaa gctccccctg gctgcatgga gagaaataaa atgtaggcag      300
caaaagtgga agaggagagg cagctggtgc actaatccag gtgagaggta aagatggatg      360
ggtagggctg aaggatggtg gggcaggtgg tgagaagtga cttggttctg gagacatatg      420
aaggaagatg gtcaggcagg ccgggcacag tggctcatgc ctgtaatccc agcaatttta      480
gaggctgagg tgggaggatt gcttgagctc aggagcttga gaccagcctg ggctacatag      540
caaaacctcc tctctacaaa taaaaaaaag tagtcgattg tggtggcata tgcctgtagt      600
cccagctact gggaggcaga gataggagga ttgcttgacc ccaggaggtc gaggctgcag      660
tgagccaaga ttgcaccact gcactccagc ctgggtgaca gagccagacc ctgtcttaaa      720
aagctaaagc aaaaaaaaaa aaaaaaaaa aaaa                                    754


<210> 118
<211> 1324
<212> DNA
<213> Homo sapiens


<400> 118
cccccgggct gcaggaattc ggcacgagct ttgctatgaa gtggcaaatt acatgtagag       60
tgtctccttc cttttcagag aacagttaat caaggcaaat cagcaagccc ccaaagtgct      120
gtaatttaac atcatgatta ccaccttcga agctatatat tttgcatact ttaaaatcac      180
ctaacttgga ctgcttgaat tacattggct tttagaaccg aaattgtaac tatgtattgt      240
atttcatggg aggtatattt tatgagcttt ttggctttct tttttcccac agcaactgcc      300
aatgaaggat gaatcccctt tttaaaaagt tgttgttgtt gttgttattt gattttgagt      360
taggagggat aatagagaag tccatttaaa aattattttt agaagctaaa gaaagtaatt      420
atgcttcctg tgaattgtct tttactggca tctttgtttt cctctttgat gttagtaaat      480
ttggtgtaat acgtggggct tccatatttc aaagtggaag ctttcttctc tgaagtcgat      540
atatggtttt gaattactag agctttggtc agtatttcct tccctatatg tcacagaggg      600
caccactgag aactgcgtgc ataggacctc aaaatacaaa attagcaggg cctcacagtc      660
agcttcctca tggctagttt ttccccctta tattacaatt tttgttttat aagtcatttt      720
tttcctgata tttccaccac ttttcagagt catctacaaa attttctttt cctcaagaaa      780
agagttcctt ttgccttatt ccttatgcct tccccactgg tattgaggtt ttgataataa      840
attggtagga aaaaaagta cctcctagaa ggaagccttc cccaccattt ccaggtgcca      900
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actgctaagc agatatattc caaaaatggt aactgtcatg tgcacactgt tggttatttt        960
taataagcct cttcctacta gaacatttta ttttccttgt tcaccataca atcatgtact       1020
ctttaacaga aattgctttt aaaaaatatc tggaactatc tttaaaaaaa ctttattaat       1080
aatcatgtat ttttactgat cacattttga aatgcctaaa agactttatt gttctaatta       1140
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tggaacaaaa tattggtcat ctaaaaactt tctgttttct ggggtctggg aaaatagaaa       1260
ataagatttc aaatattaaa taagcttaaa ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa       1320
aaac                                                                    1324


<210> 119
<211> 1182
<212> DNA
<213> Homo sapiens


<400> 119
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gaagattaaa tgcaatcatg tatgtaagga gctttgcata ctgcctgata tgagataggc        120
attcaagaaa tcattacatt gaagaaattt tcaattttcc ttctcctata aatccttgta        180
tgaaatcgaa atgagtgttg agatgaacaa aagacagcta gttcaaggtg aaaggttggt        240
aatttgctta caagatgagt ctcttcttca tttggcagct gactaaattg ttaaaagctc        300
agcctaattg tacctttgcc aggacatttt aatgacacca tttgtctctt cagttcttaa        360
gcactttggg gaaccagtag aatacaaagt agaatgtctg tgcttttttac cttactccta        420
catcatcttt ctaaaattta aatgtactat cactaaccct gttttgattt agttgagggg        480
agaaaaaaag cttaaacttt actttcaggg tctaattggc taaagccatt tttccttttc        540
tgtttccaat acttttttaa aaaaattata agttagtaat atctttctct ctgtctacat        600
atttgaactt ggatttaaag ctttctattt ttttctctta tatatgtctg tagtaatcag        660
gttttctcat tacgaagtgc taatgaaacc ttcagcttca cactggaagc ttctcaatta        720
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ctaggtgaaa gggctgggag ttacaaaggc ctgcctgttt actaagggaa tatcagcctg        960
tcttcatttc actgtttcct ttcaggattt caatgatgaa ttctcagatc tggatggagt       1020
ggttcaacaa agaaggcaag acatggaagg atatagcagt tctggttctc aaactcctga       1080
atctgagaac tctcgaggtt tgggaaattg ttgtattttg actaaaattt aattcccctc       1140
aaaacatcct caccccaccc ccttaaaaaa aaaaaaaaaa aa                          1182


<210> 120
<211> 911
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (353)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (418)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (891)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (901)
<223> n equals a,t,g, or c
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<400> 120

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ctagggcctg gagatgggac cagctgcctg cctgccccct accccaggtt gggcgccgct      60
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cggatatggc tgtcttggct ggatccctgt tgggccccac gagtaggtcg gcagcgttgc     180
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ccaccccgca gcaggcccgg ggcaaggctc gcgggaatga gtatcagccg agcaacatca     300
aacgcaagaa caagcacggc tgggtccggc gcctgagcac gccggccggc gtnmaggtca     360
tccttcgccg aatgctcaag ggccgcaagt cgctgagcca ttgaggatcg cgacgcantg     420
gcggggaccc tcatggaagc atcgccctcg cctcggacct tgcctggcgc tattttttgca     480
gggagctggg gagcaggaac gcctcggacc tgagtgctct ccatattgtg gggttgaagt     540
ctggatggga gcttgccaag tccctttttta ggctttttaa ttaggaagca tttcgaacct     600
gcgcaacaga ccaaagaaca gtacaaagaa catccgtgta cccagtaccc tgactaccga     660
ctacctacaa cccgtccctg ccccatcctg agttctttttg aagctgatct caggcatcgg     720
attatttctt ctgtaaatat ttcagaatgt atctctccaa gatgagagct cattaaaaga     780
yaattacaaa gcttatcaca tccaaaagaa ttatcaataa ttttgaaata ttattaaacg     840
tgtaataaat gttcaaaraa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa naaaaaaaa      900
naaaaaaaaa a                                                            911
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<210> 121
<211> 1099
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1051)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1073)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1076)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1087)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1093)
<223> n equals a,t,g, or c

<400> 121

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ttttttaaaag ttgctgtttta aattaacttc ctgcatttct aatgtagaaa aaatatggca     120
cagtgatttg aattttgttt atggtttatt atcttcctaa attatcagct cttttaaaata     180
tgggtctctg gcctgtatac catctgataa attaggttgg gtaaattttt cacctgaaaa     240
aattcattct tttgacccag gttgtttggc ttggaaaaaa aaaatcacat actcattgca     300
tgattaaact tgtccatcag attgtgattt tgtgcgttat gaggattgta gctggggtaa     360
ttttaaaatg ttggtatttg gatagaactg ccagcccagg attttgataa agatcaaaat     420
atatactgta tctaaagttt cttttttaaa agttatttca cttataatca aaaggtttaa     480
ataagtttag tgtatatttt atgattagta ttattttgta tcgattcaga gagaggaaaa     540
ctgcattccc atagacaggg agacttggtg cattaatatc caaagcttag tttaagctgg     600
tgatgattag aaaagtggct ttcatttgtg ttctctggaa gattctcagt agtcctgtgg     660
gcatgtgaac aagagcatgt gtaatcttca taatgtatgt cttgttagca gaaatgtctg     720
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78

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aggcattgct gagatgtagg atgagctgag gtactggttt tgtctttcat ggttccctat    780
tatgtttttt gagaaactga gcttttcctg acagtgttta gtttttcttg gctatttact    840
aatgctatta atagtaacag tttccattat ggagcctcag taggttcttg acatacatta    900
acccattgct attatgtaat tttctaataa aatgatgtga taaaacatat tttctgtaat    960
atactcatag aatatgtgat tataagtaaa taaatagatg ttggggtaaa aaaaaaaaaa   1020
aaaaaaaaaa aagggcggcc gcccaaagga nccccgaggg gccagctaag cgncancgaa   1080
gcaagcnccc ccnaaaggg                                                1099


<210> 122
<211> 1379
<212> DNA
<213> Homo sapiens

<400> 122
cccgggtcga cccacgcgtc cgcttcctca ggtccaagag aatgggagga gggtcatgtt     60
gaagtgtagc cactggaact ttcttgcatt tatggagttg cttttttcttt cccaaggaaa    120
ctgatgtttg cctgtccgct ttatctttgt agtacatgaa cagttcagcc ttagactatg    180
taactgtttt ctcatcctta gctgaaaatg aggggcctac tgtattgcga gactgttcag    240
gggtaggggt ggaggggggtg gtcccttaat ggcccctgaa gatgttggat gtgtttctca    300
aaagctgctt tgtctctttc ctgagtttaa tagtgaaact actaaacatt aatagatttg    360
cacagccaca aagaatgaga gttgataata ccgaagaagt gatgcaaaaa caaaaaatca    420
cattactgat cattgatagt attacaaata aatgtctctt cctttctctt cctcccttcc    480
tccccctgcc ttcctcttaa cctatgtgct catccttgct acttgaggct gttatttccc    540
tccgagtatt taaggagccc aaacaccttg gtcttcctgg gtgggggcat aattaaggga    600
agggagtgta taaggaagga aacctcatac cctccattcc catccctgga tatattgcct    660
tttcagcagc ctcgggttca gtgtgcttgg ggtcaggagt gccaggttcc caagagcagc    720
gtaaacatc cctgtacccc ttgacagtta taagcatttc tgcgttaaac ttgaagattc    780
cagagattcc ccacgaccta atgatctaag aatgcagatt ggattctttg atgttcaaat    840
ttctcattta cttatgaaaa tccctaatta tatagtttta tataatgtgt atacagagta    900
ggattgttga tgaaattgag cggttggaac accctcatgg aacactggca acatggaatg    960
tagagagctg atgtcttccc cctcatagag gccattggct tcctttgtat aaggagaggg   1020
agaagtgatt ctggaaggag aagttggtat gtctagcttc attgcggccc ctcgggctac   1080
ccagcaagag gattctgcat caaggaactg gacgagccgc tacccaaact gccaccatct   1140
ttactcttta caaaatggac ccatcgagaa tgttgaaaag cttggaagta tcacttttga   1200
aaaaaaaaaa aattattttg cattcagcat ggactcgacc aggcatctat ggagattatt   1260
ttttttgcttc attttataaa gttgtattta gaaaagtctt aagtattgtg ctttgtaaag   1320
aagatgatta aaatgaaatt ttgtgagaat aaaaaaaaaa aaaaaaaaaa aaaaaaaaa    1379


<210> 123
<211> 581
<212> DNA
<213> Homo sapiens

<400> 123
gaaggatatg gactattgca atacatttct tccttcaaat cctgccactg ttttgttggc     60
ccacaactaa taggacctca aaataagcca tgctgctttg cacacacact agccttcttt    120
tgtactttc attctggatg ggcttggcca aaacaggctc aggccaaaga cctcccaagc    180
tgtatgtact tccagtatcc tgaaacagtg tttggtgaca taatgccaag ggtaaacaag    240
cctgatttag gcactgcttt atccaggggc ttcacccatg aaattaataa aacttatctg    300
agtcacttga aacttggttc ccagaaaaca catttctggt ttataatctc cttttatgct    360
cacctgacat taattatcta tccttgatga tgtgtttaaa ctgagtagca gaaaacagag    420
gccacacttt ctgggaaatt ttaaaggaag aaaccatttt taatgagatg aaaatattta    480
acgaatttaa aaagctaatg acaattttga gaaaaggttt gggatgtata ttgctatgta    540
atttaataaa ctgattttat ggatataaaa aaaaaaaaa a                         581


<210> 124
<211> 1284
<212> DNA
<213> Homo sapiens

<400> 124
```

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cccacgcgtc cgcggagaca ggacactctt cctgaagcgg ggcgcagatc agaggcagaa    60
gaggaggagg ccaggaccat cagagtgaca cctgtcaggg gccgagagag gctcaatgag   120
gaggagcctc caggtgggca agacccttgg aaattgctga aggagcaaga ggagcggaag   180
aagtgtgtca tctgccagga ccagagcaag acagtgttgc tcctgccctg ccggcatctg   240
tgcctgtgcc aggcctgcac tgaaatcctg atgcgccacc ccgtctacca ccgcaattgc   300
ccgctctgcc gccggggcat cctgcagacc ctcaatgtct acctctgaag cctccttccc   360
tgcctgccca cccctccatg ctccacgcag gcactcacgc taggacagca ttaacacctc   420
atctccgggt cctggtctga atcccctcct acccctgtgg ccatcctgcc atacatccag   480
gacattgagt tggaagacta tgatctgggt gggggcagga aacatggct tctctttacc     540
cagtgggtcc cttcgatgct gagggtggtg agtatgtcac tatgcaaggg ccctgagact   600
atttgctgtg ggctctcctc cagcctgccc agggcccacc cagatgcctc tggggttacc   660
cctgtctgct tctggttttt ctgttggaga tctataggtc cttttcctgc ctccttcaca   720
tttcctcccc agcttttgcg gccacaacac atcagtgtca tttgggtgtt ttggcaactc   780
aggggccttc ggatgatctt aaacctttgt gttcagccag agccctgtg ccctggtagg     840
cgttggggtt agtatctctc gggtgccctc agagccacct ctgcctgtga tcgtctgatg   900
aggctccctc ccaacctgat ccaaaagcca gtctcaggag tttacccctg ggatggggga   960
tgcatctgca cctgactttg gggccacgtg ccctgtggca ccccagctca ctgggagtct  1020
caggagggat aaccggattt ctgctctttc ccctgtcact cccacatcac acagaaaaat  1080
ggcattcctc tctgtctctc cctggcatgg agagggcaga ctgtgcacat ttcactaggg  1140
tccaaataca gaagggccca gggcccaggg gcttgcagct tcgtgagggg tctctggccc  1200
agtttccaat gaataaagtt ctcttgacag ctmaaaaaaa aaaaaaaaaa aaaaaaaaaa  1260
aaaaaaaaaa aaaaaaaaac tcga                                         1284


<210> 125
<211> 431
<212> DNA
<213> Homo sapiens

<400> 125
ggacgctggg ttcattaatt acctttaaac cgttccttat ttttttaag attttaaatt     60
gtattttggc ttttgcctcc agtatccttt ctggttgctc tggtttgaat taagttccta   120
ttatgctgca gcacatatca accttccta agtaaccatt tcctggaatg tgaagcatcg     180
gtgccattag cagaccatat gcagaaatgt cgtgtacttg catttctttt ttgtgcactc   240
tataaggctg gttgtgactc agatcagctt aacttttat attatgttat ttcactaact     300
gctacagtca aaatgatcaa atctttgtac aatagaaaat tatttaaatt ttatttttct   360
actgacattt ctaattctag tgtaaatgtt tatcaataaa aaattacttt caaaaaaaaa   420
aaaaaaaaaa a                                                        431


<210> 126
<211> 876
<212> DNA
<213> Homo sapiens

<400> 126
ccacgcgtcc ggaaaaaaag tatggaaaag gaatgttgac cgagctttta tgcttaagca     60
gcagatgaag atagaaccaa gatcactgaa agcaagtgtt tagaacagca aaaagagtat   120
cccaacattt cagcattgga actacagaaa gttttcagac agaggggaag ttaccaattt   180
taaatgctaa gtaaagcatg agattttgct gcttgatctt gcagatactg accagattag   240
ttctaacaaa atatggaagg agtggcatac ggtggaagaa agaaggcagt agctgctgtt   300
gtagttattc atgttagcct cagaggatgg tgagacatcc agatgaagag gttggtacgc   360
aattctagaa ttgaggaggt gtctagatag agatataaat tgtagtgaca tcagtaaaga   420
gacaataaca ggctttggaa ggtgagtaag aatgaaaagg gaaggtctgc cacctaccct   480
gaagacatac atttaaagga actatagtag agagataaga ggaaaacaag aagagtggag   540
tttcactgaa ccaagacaaa caagtttcaa aaaggaaggt gaagttggcc aggtgtggtg   600
gttcacgcct gtagtcctgg cactttggga ggctgaggca ggcggatcac aaggtcagat   660
cgggaccatc ctggccagca tggtgaagcc ctggttctac tggaatgcaa aaattggccg   720
ggtgtggtgg cgcgtgcctg tggtcccagc tgctcggggg ctgaggcggg ggagtcgctt   780
gggcccggga ggcggaggtt gcggtggggt gggctctcgc cactgcactc cagcctggtg   840
acggagcagg acttcatctc aaaaaaaaaa aaaaaa                             876


<210> 127
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80

<211> 2157
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1334)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1348)
<223> n equals a,t,g, or c

<400> 127

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ggcacgagca tgcctatcac tgtccccgaa ggccttccag tgggatgaaa tgtggagatg    60
gaaggcagtg acactgatga tcctgaccct gtctaggtcc aggctaatgt gtgcgtttgt   120
gtcttggttt ttaacaaaga agtttaaaag gtaaaaagaa agttaaaaaa tttaaagtag   180
aaaacagctt acagaataaa aatatacaga aaatattttt gtacagcagt acaatgtgct   240
tgtgttttaa actgttatta caaaagggtc aaaaagctgt aaaaaaattt tttaagttca   300
tgaagtaaat aatttacagt aagctaggtt taatttatta ttgaaagaaa aaagcgtatg   360
aataaattta gtgtagctta agcataccgt gtttattttt attttttcata atgtctgctc   420
agtaacaagt gtacagtgtt tataaagtct acagtagtgt acactcatat cctagggctt   480
cacattcatt caccactcat tcactcactc acccagagca acttccaggc ccacaagctc   540
cattcatgct aagttcccta gataggtcta tcatttttta tcttttataa catatttta    600
ctttaccttt tctatattta catatgttta gatacaaaaa tatttaccat tgtgttccaa   660
ttgcctgcag tatttagtac agtaacatac tgtgtaggtt tgtagcctgt agcctaggag   720
caacaagcta taccatatag cctaggtgtg tagtaggcta tgccatctac atttgtgtta   780
agtacactct atgatgttca catgacaagg aaatttccta ctgacaatgt atttctactg   840
ttaagtgata cataactata tgtatattag tttgtattgt tcagtaatgg agagattgtg   900
ttagactctt ggggccaggg atcaagtaac tgtactaggg tccccaacac ttaggtgcca   960
tggcaataaa taaatgaaga gctaaccaaa tgcctgcatt ctggacagct ctgtttaaaa  1020
ggtatttcat ggagtttttc atttaatcaa tagaaatcca atcactaggc caggcatgga  1080
acctcacgcc tgtaatccca gcactttggg aggtggaagc gggtggatca tttgaggtca  1140
ggagtttgag accagcctgg tcaacatggt aaaaccccac ctttactaaa attcaaaaat  1200
tagccgggtg tggtagcaca tgcctgtaat cccaggtact ttgggagcct gaggcaggag  1260
aatcgcttga acccaggagg cggaggttac ggtgagtgga gatcgcacca ctgcactcca  1320
gcctgggcga caanagcgaa actctgtntc aaaaaaaata aaaataaaaa aagaaaaaaa  1380
aaaagaaatc caatcaataa aagcagagaa tagtttccat tcagtaagtg gtaaacaaca  1440
actaatgcat ttggcacttt ctctttcaca gcttctatct aaagccaatc tcatgaggca  1500
ccaactttca taccaggcac tatcacttct ctgcttccta tatctccctc ctctcccaga  1560
gacagaatgt ttcagaaagt agatttgctg cctaagattc atgtcattga agctgcagta  1620
gaagagtcat ttaatatatg aaatataagg caagactttt caaaaaaaat tctctctcag  1680
aaaatacaag tcactttata ttcaaatact tacaaagtac ctcttgctgt aggaagtttt  1740
gcaatttcct tattttgaat acaaagtacc agctggggat gacacaatac cctaaaacaa  1800
cctcagttaa ggctgctttg gctaatggta atcagtgaaa caagataaat taaacacaaa  1860
tttagtaatt atccctggag atataaactc acacttccat gtgtaaactg ccattgtaag  1920
gccagctttt tattttgttt attcattttt tactttttt agagatggag tctcaccctg  1980
ttgcccaggc tgtctcgaat ttgtgggctc aagctatcca cccacttggc cttccaaagt  2040
gccaggatta caggcatcag tcaccatgcc tggccagtag accaacgttt taaagatcat  2100
tttagctggg cgcggtggct catgcctgta ctttgggagt ccaaggtggg cggatag     2157
```

<210> 128
<211> 1585
<212> DNA
<213> Homo sapiens

<400> 128

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ggcacgaggg tgggcgctct ttctttttct cttagaagag ggtttagcac aggttttttc    60
gttctcactt ccacaccacc ttaccgcctc ccgaccccc ctctcccct ccccacctat    120
cgtcatgacg gcctctccgg attacttggt ggtgcttttt gggatcactg ctggggccac   180
```

```
cggggccaag ctaggctcgg atgagaagga gttgatcctg ctgttctgga aagtcgtgga    240
tctggccaac aagaaggtgg gacagttgca cgaatctagt tagaccggat cagttggaac    300
tgacggagga ctgcaaagaa gaaactaaaa tagacgtcga aagcctgtcc tcggcgtcgc    360
agctggacca agccctccga cagtttaacc agtcagtgag caatgaactg aatattggag    420
tagggacttc cttctgtctc tgtactgatg gggcagcttc atgtcaggca aatcctgcat    480
cctgaggctt ccaagaagaa tgtactatta cctgaatgct tctattcctt ttttgatctt    540
cgaaaagaat tcaagaaatg ttgccctggt tcacctgata ttgacaaact ggacgttgcc    600
acaatgacag agtatttaaa ttttgagaag agtagttcag tctctcgata tggagcctct    660
caagttgaag atatggggaa tataatttta gcaatgattt cagagcctta taatcacagg    720
ttttcagatc cagagagagt gaattacaag tttgaaagtg gaacttggta agtgcttgag    780
tactatttat ttgagctttt taacttgttt ttttttttt tgtctgtttg tttgtttttg    840
agacagaatc ttgctctgtc gcccaggctg gagtgcagtg gcacgatctc agctcactgc    900
aagctccgcc tcccgggttc atgccattct cctgcctcag cctcccgagt agctgggact    960
acaggctccc gctaccatac ctggctaatt tttttgtagt tttagtagag atggggtttc   1020
accatattag ccaggatggt ctcaatctcc tgacctcgtg atctgcccgc ctcgcctccc   1080
aaagtgctgg gattacaggc gtgagccacc tcgcccggcc tttaacttgt ttttgttcca   1140
taattgtgcc tcttaattct tgttatattt gagaaacttt actaatcctt ttagctatcc   1200
tttcttgctg ttcggtcatc tgtaaaagaa ggttgtatta cttagagctt gatattggga   1260
ataaaatgta atgacttact ggcatcttta gtcaccctga ccttaagtat attatatgct   1320
catatctgtg attgttattt tggtctcccc aaactatcca atctttcatt tagaaaattt   1380
ccaaaggaga aattgtaggc tttaatagag ttcacaattt ttactgagat aaaattttac   1440
gtacattcta taagtacatt tatttattta tttattttag ttttgagaca cttgctctgt   1500
tgcccagctg gaatatcgca gtgagctgag atcgcgccac tgcactccag cctggtgaga   1560
gagcaagact ccatcttaaa aaaaa                                          1585
```

<210> 129
<211> 792
<212> DNA
<213> Homo sapiens

<400> 129
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cagacatggc tgaaatccag tcccgcctgg cctacgtgtc ctgtgtgcgg cagctagagg     60
ttgtcaagtc cagctcctac tgcgagtacc tgcgcccgcc catcgactgc ttcaagacca    120
tggactttgg gaagttcgac cagatctatg atgtgggcta ccagtacggg aaggcggtgt    180
ttggaggctg gagccgtggc aacgtcattg agaaaatgct cacagaccgg cggtctacag    240
accttaatga gagccgccgt gcagacgtgc ttgccttccc aagctctggc ttcactgact    300
tggcagagat tgtgtcccgg attgagcccc ccacgagcta tgtctctgat ggctgtgctg    360
acggagagga gtcagattgt ctgacagagt atgaggagga cgccggaccc gactgctcga    420
gggatgaagg ggggtccccc gagggcgcaa gccccagcac tgcctccgag atggaggagg    480
agaagtcgat tctccggcaa cgacgctgtc tgccccagga gccgcccggc tcagccacag    540
atgcctgagg acctcgacag gggtcacccc ctccctccca cccctggact gggctggggg    600
tggccccgtg ggggtagctc actccccctc ctgctgctat gcctgtgacc cccgcggccc    660
acacactgga ctgacctgcc ctgagcgggg atgcagtgtt gcactgatga cttgaccagc    720
ccctccccca ataaactcgc ctcttggaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa    780
aaaaaaaaaa aa                                                        792
```

<210> 130
<211> 1351
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (864)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (876)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (883)
<223> n equals a,t,g, or c

<400> 130
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ctttgagccc ctctcattcc actttagcaa tctttttggt aagaactctt aaagccaaaa    60
gtctgctgaa aagatttgct gattattagt ttaaaaatct tgtaacactc agcagtgcta   120
ttttgagtca tcccagtttc ctgaaagtaa tgcccagtct tcctgaatcc tccttaatag   180
cagaaccttg gtgattttgt tggctcatat gaatgcttgt catggatatg ttaacaattt   240
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cagcacaggc tgtaggccca ggagtgactc aaaggagttt ttccctcttt cttacggttc   360
aaaggtgacc ctggtggtgg ccagagcagt aatgcttgtt tgatgctctt catggctcat   420
ctgcttctca gaacccaccc gttgagtttg tgggtaacca gcaggcaggc caaagactgg   480
tgcttttcat ttcatccttt agagggatga aacagttatt tccgtctgat gagcattcgg   540
tagaattttt gaagtgagat tttatgaagt caaaggggac tttacacaga tctcgacctg   600
ctttgaaacc tagaggtggc cctttgattt gtgcgtgtcc ttgccctctg gacaacttaa   660
tatttcaagt aatcgaatac caacttccct gccagcccac ctgccttccg ccccgcttgt   720
gtaacagtcc tgttttgttg agttgctgct attgcactgc cagtgcagcc cacaccaaat   780
cacaacccaa gatactcaga taggaagact ccttcctctc ccagtacttt accaaaggaa   840
cccccgccag gacccacatg gggnccacgt gttggncagt ggnaatcagc ctgtgcaggc   900
tggggatctc aggctgatca gtaggggcca gctttggagc cagccaagct gaatcccaca   960
ctccaggtct gtgctcaaga gaccagatgg tgtatttcca aatggscctc tctggtatgg  1020
gcaataggca agctcctggg gtctggttat gtggaagatt cttagtggat gttccgcctg  1080
gttagctggt tctcttcaga gaatataaag tgaatgcctt tagggggtagc tctgaaagag  1140
aaacccaaca acttcattcc tagccatgaa agtagcacga tcatattgta ctgtattgtt  1200
attgtaaaat gaytatttgc catgtcatga gtaggtagat gttttgccac aaatatgaat  1260
gtgtttgttg ttcctgactt taagcaatga agattgagac aataaatagc actcagagaa  1320
tgaaaaaaaa aaaaaaaaaa tgaccctcga g                                 1351
```

<210> 131
<211> 1371
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1351)
<223> n equals a,t,g, or c

<400> 131
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ctttgagccc ctctcattcc actttagcaa tctttttggt aagaactctt aaagccaaaa    60
gtctgctgaa aagatttgct gattattagt ttaaaaatct tgtaacactc agcagtgcta   120
ttttgagtca tcccagtttc ctgaaagtaa tgcccagtct tcctgaatcc tccttaatag   180
cagaaccttg gtgattttgt tggctcatat gaatgcttgt catggatatg ttaacaattt   240
agtgtttgac attgcttcct ctgccacaaa gacaatactc tggtgacaca tgtctagacc   300
cagcacaggc tgtaggccca ggagtgactc aaaggagttt ttccctcttt cttacggttc   360
aaaggtgacc ctggtggtgg ccagagcagt aatgcttgtt tgatgctctt catggctcat   420
ctgcttctca gaacccaccc gttgagtttg tgggtaacca gcaggcaggc caaagactgg   480
tgcttttcat ttcatccttt agagggatga aacagttatt tccgtctgat gagcattcgg   540
tagaattttt gaagtgagat tttatgaagt caaaggggac tttacacaga tctcgacctg   600
ctttgaaacc tagaggtggc cctttgattt gtgcgtgtcc ttgccctctg gacaacttaa   660
tatttcaagt aatcgaatac caacttccct gccagcccac ctgccttccg ccccgcttgt   720
gtaacagtcc tgttttgttg agttgctgct attgcactgc cagtgcagcc cacaccaaat   780
cacaacccaa gatactcaga taggaagact ccttcctctc ccagtacttt accaaaggaa   840
cccccgccag gacccacatg gggccacgtg ttggcagtgg aatcagcctg tgcaggctgg   900
ggatctcagg ctgatcagta ggggccagct ttggagccag ccaagctgaa tcccacactc   960
caggtctgtg ctcaagagac cagatggtgt atttccaaat gggcctctct ggtatgggca  1020
ataggcaagc tcctggggtc tggttatgtg gaagattctt agtggatgtt ccgcctggtt  1080
agctggttct cttcagagaa tataaagtga atgcctttag gggtagctct gaaagagaaa  1140
cccaacaact tcattcctag ccatgaaagt agcacgatca tattgtactg tattgttatt  1200
```

```
gtaaaatgay tatttgccat gtcatgagta ggtagatgtt ttgccacaaa tatgaatgtg    1260
tttgttgttc ctgactttaa gcaatgaaga ttgagacaat aaatagcact cagagaatga    1320
aaaaaaaaaa aaaaaaaaaa attactgcgg nccgacaagg gaattcagtg g             1371
```

<210> 132
<211> 3397
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (24)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3081)
<223> n equals a,t,g, or c

<400> 132
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nggattcgcg gccgntccga ctgnccgccg ggctagcact gacgtgtctc tcggcggagc      60
tgctgtgcag tggaacgcgc tgggccgcgg gcagcgtcgc ctcacgcgga gcagagctga     120
gctgaagcgg gacccggagc ccgagcagcc gccgccatgg caatcaaatt tctggaagtc     180
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84
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                              3397

<210> 133
<211> 2812
<212> DNA
<213> Homo sapiens

<400> 133
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gctgaaacaa tgagaatagt gctggaacgc tgctacaatg atttgcgtct tctcagtgtc     180
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tccgagactt tggattacca gatggccttt gcagactctc atttatggaa actcctggat     300
cggcatgcaa atacaatcag attatttgtt ttgctacctg aacaatcccc agtatcttat     360
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gaaccttatg ctgcagatga aggttctggg gaaggacata aatggttgat ggtgcatgtt    1020
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gaagaagata ttaatatttc cagcaactgg gaggttttcc ttgaagttct tgatgggggta    1500
gagaagatga agtccatgtc acagcttgca gttttgtcaa gacggtggaa gccttcagag    1560
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                                   85

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tatagggata aaacagaaga attaatggaa ttgacagatg agcaaagaaa tgaactgatg   1860
aaaaaagaaa gcagtcgact ccagaagact ggacatcgtg taacatactc acctcgtaaa   1920
gagaaagcac taaaaatata tctggatgga gcaccaaata aagatctgac tcaagactga   1980
ctctgatagt gtagcatttt ccctggggga gttttggttt taattagatg gttcactacc   2040
actgggtagt gccattttgg ccggacatgg ttggggtaac ccagtgacac cagcactgat   2100
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tcatgttgtg cactatagtc aaatgtactg taaagtgaaa agggatgtgc aaaaaaawar   2220
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cattcattta ttcagcatgt aaataaaatt gatcctgttg agttatcata attgcagttc   2760
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<210> 134
<211> 1145
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (251)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (901)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1142)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1145)
<223> n equals a,t,g, or c

<400> 134
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gagaccccaa ctctgatcag ggactccctg tgctgatgac tcagggaaca gaggacctaa    180
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tggggcctga nagtcagtca gggaagggag acatggtgga gatggccaca cggtttgggt    300
ccaccctgca gctagacctg gaaaagggaa ggagagtctg ttggagaaga ggctggtggc    360
agaggaggaa gaggacgaag aggaggtgga agaggatggc cccagcagct gctcggagga    420
cgattacagt gagctgctgc aggagatcac agacaacctg acgaagaagg agattcagat    480
agagaagatc catttggaca crtcctcctt crtggaggag ctgcctggag agaaggacct    540
tgcccacgtg gtagagatct atgactttga accagcgctc aagacggagg acctgctggc    600
aacgttttct gagttccaag agaaggggtt caggattcag tgggtgatg atactcacgc    660
actcggcatc tttcctgcc kggcctcagc tgcggaagcc ctgacccggg agttctcggt    720
gctcaagatc cggcccctca crcaggaac caagcagtca aagctcaaag ccttgcagag    780
gccaaaactc ctgcgtctgg tgaaggagag gccacagaca aatgcgactg tggcccggcg    840
gctggtggcc cgggccctgg gactccaaca caaaaagaaa gagcggcctg ctgtccgggg    900
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86

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      ntccgctgcc gccctgaggc ctggagaccc aactggcctg gatctgcgtc ccgacgtagc    960
      tggcgccccc aacaccataa gccttcacag acgccagagc agccccgcac caccctcgag   1020
      cttcaccatg gggtgtggtg ggctttagtt tagtcccaga aatggagaaa aaataaaaac   1080
      tcacgttgtt ctaatgtgaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggggg   1140
      gnccn                                                                1145
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<210> 135
<211> 1509
<212> DNA
<213> Homo sapiens

<400> 135
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      tttcctcctc tctttgttcc cttcctgtct atccattgag tttatgaaat ggaagagtta    180
      actgcatgca ctagtgtttg gagggtgttg tggtttgtct ttctaattag gtgtatagcc    240
      tattcacttt cctagaataa atctcttaac ctaaatttga gtagtctgca ttttggcaac    300
      tcctctagca gcttggtagc ctagtacagg ttgttttttt aaaaaaggaa aagcaggaag    360
      gaggagtgaa ttttattaac atgtttgcca aatgtattga gatttggcct ctgaagaaca    420
      cttttcagt gttaagtttc tttaccttaa gattcagaaa tactttagaa tattattaat     480
      tttaagtcct gtctttacat ccttttggaa aacttgtatt accatgagtt tggaaaaagg    540
      acaacgaaag gcttttcatg taaagataag atctttagct atctctaacc ctgtcctttt    600
      ttcactgcat tttttctagt tttgcttcat tgcttatcat taggataggg taagtgaagt    660
      ttgctatgct gctagcatcc taagatgata cctttgttga aagaattgtg aatagcatga    720
      ttcatttcta gcagaggctg agtttaggac agcagcttcc attgagaagt ctttctgtgt    780
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      ggttgttatt cttaggttat tcccacactt gactttatca ttgtttacta ctagtaaaaa    960
      gcagcattgc caaataatcc ctaattttcc actaaaaata taatgaaatg atgttaagct   1020
      ttttgaaaag tttaggttaa acctactgtt gttagattaa tgtatttgtt gcttcccttt   1080
      atctggaatg tggcattagc ttttttattt taaccctctt taattcttat tcaattccat   1140
      gacttaaggt tggagagcta aacactggga tttttggata acagactgac agttttgcat   1200
      aattataatc ggcattgtac atagaaagga tatggctacc ttttgttaaa tctgcacttt   1260
      ctaaatatca aaaaagggaa atgaagtata aatcaatttt tgtataatct gtttgaaaca   1320
      tgagttttat ttgcttaata ttagggcttt gccccttttc tgtaagtctc ttgggatcct   1380
      gtgtagaagc tgttctcatt aaacaccaaa cagttaagtc cattctctgg tactagctac   1440
      aaattcggtt tcatattcta cttaacaatt taaataaact gaaatatttc taaaaaaaaa   1500
      aaaaaaaaa                                                            1509
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<210> 136
<211> 1365
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<400> 136
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      ttcctatgat tgttactaaa atgtattttc atgtttaaaa tgtttttgga tatttttggg    120
      ttaataacta ctacattgaa ttgcatgtta aggtgcagaa ataatacatt aaaagatttt    180
      cactttaaat taattagtaa tattgagcgc tcaccctgtg cgtggccttg tgctaaccat    240
      tagcactgca tcatttcaat tcttttataa gggcattcaa tactacaaaa tcaacatgat    300
      ttcataaggt gcaaataaaa gttggtgaca gatttaatat aattttgatc acaatttaca    360
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87

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      aatgatcttt gcaaatagtg gtcagacggc attagttttt cccttagtta agctaaatta         420
      aagggactcc atcctgttat gattatatta ttattattat tattattatt tttgaggtgg         480
      agtttcactc ttgttgccca agctggagtg caatggcgcg atctcggctc accacaacat         540
      ccgcctcctg ggttcaagcg attctcctgc ctcagcctcc tgagtagctg ggaatacagg         600
      catgcgccac tacacctggc taattttttgt attttttagtt gagatggggt ttttccacgt         660
      tggtcaggct ggtctcgaac tcctgacctc aggtgatccg tccacctcag cctcccaaag         720
      agctgggatt acaggtgtga gctaccgcgc ctggccatga tgatattatt aaacaccatt         780
      attcacattt caaataataa caatactttt tgtttttcaa aaataaaatg caatgttata         840
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      agggagatgt taatttaaaa atttccacta cacttattat ctattaacca aagcttaaaa         960
      ttttgtattc ttctgttaga taagaccttt tacccatta atttgtcttt aaggacagtc        1020
      atttggcttc tgaatgtttg aaacgatttt aaaaaataag tagtgctatg gttgtttcta        1080
      taattctaac ctttgatagt aatcagaatg tattacattt catttctgaa tagctttttga        1140
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      atattatatt agcttatttc tcttgcatta atagtactgc tgtttttgtt ttgcttcttt        1260
      atatttatgt ctagctttta tatgtaattt atctagtgtt tataaaatgt gatttgtaat        1320
      aaatgttgtt aaaatgaaaa aaaaaaaaaa aaaaaaaaaa aaaaa                         1365

<210> 137
<211> 1857
<212> DNA
<213> Homo sapiens

<400> 137
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      gcattaaagg gacaacctat aaaaagtttt gctagctcat ctttagaagg aagaaagaat         120
      attagcttgg gtgatgttta atttgggtgg cgatagtttc tgtaggctaa acttgatgag         180
      aaaagtgtac ctactctata aaggtaataa atgtaaaacc tcttgctgtt attgaggaag         240
      ctcttcaact accctaaatt tcacaaatgt aacttataac actatgaaaa gattgaccaa         300
      caatttacgt ttgctgtgtg cttagttttt gtttaagcat attctttgct gaattctgtg         360
      ttcatgagag ttaggtgttt tatgctctga actaatttat aacatattta atatattacc         420
      agttaagata taaaatcatt tgtacatagc gaattgtaaa gcagctatta aagtaggtga         480
      aataaagtat atatttgccg gttatccata tcttttagaa gtcctgacag aacaaccagt         540
      ttatttgcac ataggtagct tctgtttgaa ggaaggtaaa gttataagga aactcaaata         600
      ctataagatg tgtcaaggta tttctccaga attaattgca aagctagtgc tgaaggattt         660
      taatcagctt ctaaaatttt cttctcaata aggcatatgt tttgattact tagggaagat         720
      tcctcatttt tatttgccct ttatgcattt aatccacatg ataggacatt aaaaattaat         780
      ataaagaaaa atcgtgctca tactgtacat ctgtttctgt gcttggaact acttgttaat         840
      agtttttatc gaagctgtca gcaataaggg acataaaact gctgtattat acattgtgga         900
      attgaataaa cagcctaatt tttttttttct agtatagggt acttaagcat ttccactttt         960
      ggaagaaaag tgtattagta ttttatattg catttcattt aaaaggacag ttttttttttt        1020
      ttttttgta aatccattca ttgaaatggt ttctaaactg tataatgtaa tttggagcct        1080
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      aaatgtaaga aaaaaattta aaaattcagc ccagaaaaca aaatagtgta ttaaattagt        1200
      ttaatgtaaa aggaatttat aagatttttt tcctcaatat agataccctca cttgaaaaga        1260
      aagcacagca tacttaaagt agttctagta aacatgtcct agaaaacagt tgctaaatgt        1320
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      gttagaagta tttgtttatc ctgataattt taagccaaca tagtagtctt aaattacttt        1440
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      taattggcta cattgaccat aattaaagtt aaaattttgc caatgatgta cagttttatg        1560
      gttaaagttg ctgtggttgg ttgcattaca tgacacagaa aactgtcctc tacctcacgt        1620
      gaaataaata ttttatatgg ttttactaaa aataagactc atgtatctgg tcacctagtt        1680
      tacaaatttt gaattatatt tattgaaaca tgacatactg tgctctgagc ttataacctca        1740
      attgtatttt gtgctgtttt ccattttcat gccttgtaaa taacttgtat agattgtgga        1800
      tcaaatacta aataaaaact tttaatgcca aaaaaaaaaa aaaaaaaaaa aaaaaaa           1857

<210> 138
<211> 1810
<212> DNA
<213> Homo sapiens
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88

<400> 138
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accccatggg aacgatggac atatggcaga ctgaacagac acaccccatc actggagatc   120
ctgtgcagaa atcatgagct gtgctctcac acacacagtt ccctcgacta ggtctgcttt   180
cttgttctta ctgatttgt aagcttttca gagctgatga taaaatttgt gcttatacca   240
ggaaaacaga aaaggatgtt gctcttaagt cactggcaac attctaataa catgcactta   300
actggcttga tcttttgtt cttggtttct catcctaatc aagacccttg gctgtcttgt   360
cagaaagaga gcagcagaga aaatagtgac cttgaatatt aagacattgg gcaagaaaaa   420
gatattcatc caggcttctc atataacagg atgtctagac taataccact ttgtttttatt   480
atgtccaata ctaggaatct ttgagggatt aaaagagaaa agttcacctt ggcttctttt   540
ttaaaaattc agaagattaa acataaaatt ttaaccagtg tttactgatt cctttttcaat   600
tttatattat gatcagttaa ggtacaggag agaaatcctg agatccaaga ggaatcaaga   660
gtagaaagag aagaaagagg caagaggaaa ggagaaatgg tgctaagaca gaggaggttg   720
ccctggctga gtgctgccta aactcagcaa ctgctcctca tcccaccagt catccccttc   780
agatctgctg gactgacagg actcttcctc ttgctgcacc tgggccccag gtcctaattc   840
ggtttacctg gttccctgcc aaaaattctt aaagcagtgt tcaggcctcc tccagcatgt   900
gctccaggtt accacccat cactgagaac tgttgctcca tgtgctctta gtggaagtcc   960
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tctgtccatc gttcccaggt cttcccttga gagaggagaa gagtggttcc caaataccat  1140
ttaagcacta gtgatagaga caaagttctt gtcagactat ggcaaaatga gaaaaataaa  1200
ggggaacata gaatatggaa acacatactg cattgtttat aagtgcatat gtgtatgaaa  1260
cctcattggt ggaagcactc tgaaaaacca tgaaatgttg tggaactgtg cattattgtt  1320
gttgttgttt ttttttttttt aatctccatt taaccttaga gtcttgcagc tgccccagct  1380
aaccactaga atgcaaggcc tgtggctgcc atcgcttccc ttcctctcca gcgcacaaac  1440
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cagaggtata gcccatcaaa cttacagact tggcctctaa gaggacccaa aagaagtatg  1560
attttaggaa atttatacta ctctgccttc tttttatctta gtgcagtagt gttatctttc  1620
taagacttac aagcatttct tgtttcttgt ttgggattgt ttgaatggaa ggcatgatcc  1680
cttccttacg ttgcttacat tccaaacgtt ttatcgtcct tgtaagcaaa caagacaatt  1740
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aaaaaaaaaa                                                         1810
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<210> 139
<211> 1879
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<400> 139
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caaagaccga atgcacggcc ttgtagggga cgccccagat tgtcagggat kggggggatgg   120
tccttggagt tttgcatgct ctcctccctc ccacttctgc accctttcac cacctcgagg   180
agatttgctc cccattagcg aatgaaattg atgcagtcct acctaactcg attcccttttg   240
gcttggtggg taggcctgca gggcacttttt attccaaccc ctggtcaytc agtamtstkt   300
tactccagga aggcacagga tggtacctaa agagaattag agaatgaacc tggckrgacg   360
gatgtctaat cctgcrccta gctgggttgg tcagtagaac ctattttcag actcaaaaac   420
catcttcaga aagaaaaggc ccagggaagg aatgtatgag aggctctccc agatgaggaa   480
gtgtactctc tatgactatc aagctcaggc ctctcccttt ttttaaacca aagtctggca   540
accaagagca gcagctccat ggcctccttg ccccagatca gcctgggtca ggggacatag   600
tgtcattgtt tggaaactgc agacacaagg tgtgggtcta tcccacttcc tagtgctccc   660
cacattcccc atcagggctt cctcacgtgg amaggtktgc tartccaggc agttcacttg   720
cagtttcctt gtcctcatgc ytcggggatg ggagccmcgm cygaactaga gttcaggctg   780
gatacatgtg ctcacctgct gctcttgtct tcctaagaga cagagagtgg ggcagatgga   840
ggagaagaaa gtgaggaatg agtagcatag cattctgcca aaagggcccc agattcttaa   900
tttagcaaac taagaagccc aattcaaaag cattgtggct aaagtctaac gctcctctct   960
tggtcagata acaaaagccc tccctgttgg atcttttgaa ataaaacgtg caagttatcc  1020
```

```
aggctcgtag cctgcatgct gccaccttga atcccaggga gtatctgcac ctggaatagc    1080
tctccacccc tctctgcctc cttactttct gtgcaagatg acttcctggg ttaacttcct    1140
tctttccatc cacccaccca ctggaatctc tttccaaaca tttttccatt ttcccacaga    1200
tgggctttga ttagctgtcc tctctccatg cctgcaaagc tccagatttt tggggaaagc    1260
tgtacccaac tggactgccc agtgaactgg gatcattgag tacagtcgag cacacgtgtg    1320
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gccagtgcgc tccagcctta tctaggaaag gargagtggg tgtagccgtg cagcaagatt    1500
ggggcctccc ccatcccagc ttctccacca tcccagcaag tcaggatatc agacartcct    1560
cccctgaccc tcccccttgt agatatcaat tcccaaacag agccaaatac tctatatcta    1620
tagtcacagc cctgtacagc atttttcata agttatatag taaatggtct gcatgatttg    1680
tgcttctagt gctctcattt ggaaatgagg caggcttctt ctatgaaatg taaagaaaga    1740
aaccactttg tatattttgt aataccacct ctgtggccat gcctgccccg cccactctgt    1800
atatatgtaa gttaaacccg ggyaggggct gtggccgtct ttgtactctg gtgattttta    1860
aaaattgaat ctttgtact                                                 1879
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<210> 140
<211> 1879
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<400> 140
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caaagaccga atgcacggcc ttgtagggga cgccccagat tgtcagggat kggggggatgg    120
tccttggagt tttgcatgct ctcctccctc ccacttctgc acccttcac cacctcgagg      180
agatttgctc cccattagcg aatgaaattg atgcagtcct acctaactcg attccctttg     240
gcttggtggg taggcctgca gggcactttt attccaaccc ctggtcaytc agtamtstkt     300
tactccagga aggcacagga tggtacctaa agagaattag agaatgaacc tggckrgacg     360
gatgtctaat cctgcrccta gctgggttgg tcagtagaac ctattttcag actcaaaaac     420
catcttcaga aagaaaaggc ccagggaagg aatgtatgag aggctctccc agatgaggaa     480
gtgtactctc tatgactatc aagctcaggc ctctcccttt ttttaaacca aagtctggca     540
accaagagca gcagctccat ggcctccttg ccccagatca gcctgggtca ggggacatag     600
tgtcattgtt tggaaactgc agacacaagg tgtgggtcta tcccacttcc tagtgctccc     660
cacattcccc atcagggctt cctcacgtgg amaggtktgc tartccaggc agttcacttg     720
cagtttcctt gtcctcatgc ytcggggatg ggagccmcgm cygaactaga gttcaggctg     780
gatacatgtg ctcacctgct gctcttgtct tcctaagaga cagagagtgg ggcagatgga     840
ggagaagaaa gtgaggaatg agtagcatag cattctgcca aaagggcccc agattcttaa     900
tttagcaaac taagaagccc aattcaaaag cattgtggct aaagtctaac gctcctctct     960
tggtcagata acaaaagccc tccctgttgg atcttttgaa ataaaacgtg caagttatcc    1020
aggctcgtag cctgcatgct gccaccttga atcccaggga gtatctgcac ctggaatagc    1080
tctccacccc tctctgcctc cttactttct gtgcaagatg acttcctggg ttaacttcct    1140
tctttccatc cacccaccca ctggaatctc tttccaaaca tttttccatt ttcccacaga    1200
tgggctttga ttagctgtcc tctctccatg cctgcaaagc tccagatttt tggggaaagc    1260
tgtacccaac tggactgccc agtgaactgg gatcattgag tacagtcgag cacacgtgtg    1320
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gcctcctgcc tgattacacc actgcccccg ccccaccctc agccatccca attcttcctg    1440
gccagtgcgc tccagcctta tctaggaaag gargagtggg tgtagccgtg cagcaagatt    1500
ggggcctccc ccatcccagc ttctccacca tcccagcaag tcaggatatc agacartcct    1560
cccctgaccc tcccccttgt agatatcaat tcccaaacag agccaaatac tctatatcta    1620
tagtcacagc cctgtacagc atttttcata agttatatag taaatggtct gcatgatttg    1680
tgcttctagt gctctcattt ggaaatgagg caggcttctt ctatgaaatg taaagaaaga    1740
aaccactttg tatattttgt aataccacct ctgtggccat gcctgccccg cccactctgt    1800
atatatgtaa gttaaacccg ggcaggggct gtggccgtct ttgtactctg gtgattttta    1860
aaaattgaat ctttgtact                                                 1879
```

<210> 141
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<211> 556
<212> DNA
<213> Homo sapiens

<400> 141
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ctgtgtgact gtcagtgttg caagctggct ggatccaacc atctcttctg aaataatgca   120
tccaaagggt tgatattctg ggggaggtca ctgcagaagg atggaactga ccttttattcc   180
ccagtgggca gttactgagc tttcctcctc agagccatgc tggcagccct gggacagaga   240
acggtgtggc tttggctgcc tctgcatgga atcttgcccc ggactcctga agactgcaca   300
aggaatgagg aagatcaggg acaacctggg aactgaataa ctttcaaagc cagtgctcag   360
cttctctgct ccgtactagc gtttacaggt cttaattcaa accagatgcc tgtactagtt   420
tttagacccc aagtcaacct ttctgagcca cagcttcccg ctgggaataa tgatgcctgc   480
cctatctacc tcacagactt gttatgagga taaagtgaga ttaaactgcc tcaaagtgaa   540
aaaaaaaaaa aaaaaa   556
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<210> 142
<211> 1632
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (244)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1116)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1300)
<223> n equals a,t,g, or c

<400> 142
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tgaaagtacc ataaaaatat aagggaaaat aagctttcct agaattttc agtgttctag   120
tttataaaca gtgatgtttt ttattaacct atttcatcca ttcaaagaca ggcctttctc   180
cacaccacat tttcctctaa aatcatgata acacttttaa attgatggtg tcttccagtg   240
tgtntcagcc agatggcagt gtgttacagt tccaggaaaa tcgttcacat cttccgtaag   300
atcaagaagg ctctggcatc agataagatc aaatgttgtc tttctgtttt aaatatgtgc   360
cgcaaagaga tttgcttaca atctattgag aaagctaaaa cagagcagac attgtcctgt   420
tgcggggtag atgaatagcc taagaatagt ttagacaaat tctgaaaacg aatttacctt   480
agaagatgtt catgttagat ctggtaaaag taacatgtta ttttttctgtc aagccctttt   540
tgtacttgcc gtttattaca tattttagat ttatttttta ttttcgaaac atccaaaaag   600
gaatgctaat tagtgaaatg gaagaatttc cattttcaaca ccttaggaaa aaaaaaactg   660
acttgacata cctaagaaaa ggccaagttg atttactttg tcagtctctt catttgtgat   720
acgtaaagtc cgttgttacc tagataaatg taggtttgat ttcttggaag caatcactta   780
agactttcca tttttcttcaa agcatcttac tcaacctgca tgtgggatct gtactgagca   840
attagagatt caaaacaact gtcacacacg acagaggtgg taaccgccca acaggttcac   900
ctcttccgcc gcctacacag agccgattta tcaagacagg aattgcaata gaggaagagt   960
acacagagct gcttgtgcag gagactggag tcttattagt actcaaatcg atctccctga   1020
gcattcgggg atcagagttt ttaaggataa tttggtggga gggggaaggc cagtgagtca   1080
agggtgttga ttggttgggt cggagatgaa atcatnaagg aattgaggtg tccttttgtg   1140
ctaagtcagt tccagggtgg gggccacgag atcagatgag ccagttaatc gatctgggtg   1200
gtgccagctg atccgtcgag tgcaggtctg caaatatct cgagcaccga cataggagca   1260
gtttagggag ggtcagaatc ttgtagcttc cagctacatn gactcctgaa ccataatttc   1320
taatcttgag gctaatttgt tagtcctaca aaggaaatct agtccccaga caagaagggg   1380
gtttgtcttg ggaaagggct gttatcatct ttgttttaaa ctataaacta aactaagttt   1440
```

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ctcccaaagt tagttgagcc tacacccagg aatgaacaag gacagcttgg aggttagaag    1500
caagatggag ttggttaggt cagatctctt tccccacctc agttacaatt ttgcaaaggc    1560
ggtttcagaa tcagagcacg aagtgttcct ataaaaaaaa aaaaaaaaaa cctttcctta    1620
attatgctca ta                                                       1632


<210> 143
<211> 1380
<212> DNA
<213> Homo sapiens

<400> 143
gggaaaggaa gggatggtgg gccaggtggc tctctagatg ggaggtgtcc gggaacttgc      60
aggtctcaag cctgggtgac taggaggatg gtgcgcaaaa caggaaaggc aggacgcggc     120
tgctgggttc ctttctcgag tgcacgcagg gctgaaagga ggggagctga gatgagaacg     180
gcccttttcc ccactgaatg ctgcctgccc atgtgtgtcg tcttagctgt tttctatttg     240
cccatcgtgt ttagtagaat aattgaatct gcagacagtt ttgactagtc cattttgcct     300
ctcactccac cccgctgcct ctcgtgcttt ctctctctct tccttacctg cctgctgcca     360
gctccttgcc tcccctctga ttactgcgcc cccgcaataa ctcactgttt gatcttccac     420
atacgggaac tcgaaaccca gctactgtct gcccagcaag gctgcagtgt ccagggtgac     480
ccaggccatg tcctgcactg attgtaatcc tcctctgcgc ctaacacaga gccttacgtg     540
tataccgagt agaggagaag gaaggatgtc aaacatgtca ctaccacccc ccagtgcatg     600
ttggtctccc tcacgctgga ctgtggcagg agtcttccaa aactgctctc agtgccccat     660
cccctctgtg tgcaatcata tcgttgctta cttaaccaac cattcatctc ctagggcctg     720
agttctgtta cccagcctcc tcagaatctt cagcagttcc tcatttccat aggggaaagc     780
cagctgttta tttcctttac ttatgcaacg aataagtcag tgtcagatag tattttgtt     840
gataaagccw cagcggmgag caaaacattt tggtcctgct tcctgtgagc tgactttctg     900
caagggagag agatgataaa tgcacatata atatagttga gagtgatcag tgctgcaagg     960
aaaagcagag ctgaggaagg agcaaatggt ggagagggag gagagggagt ggtgctggcc    1020
tagacggtca aaggttgctg tggtaagggg acactggagt taagatctga gtgaggctgg    1080
gtgcggtggc tcatgcctgt aatcccagca ctttgggagg atgaggtggg cggatcactt    1140
gaggtcagga gttcaagacc agctcgggca acatggctaa tccccatctc tactaaaagt    1200
acaaaaatta gcctggcatg gtggtatgca cctgtaattc cagctacttg ggaggctgag    1260
gcaggagaat tgcttaagcc cgggagggga aggttgcagt gagccgagat cacaccgctg    1320
cactccagcc tgggcaacag agtgagactc tgtcacaaaa taaaatataa ataaaaaaaa    1380


<210> 144
<211> 1380
<212> DNA
<213> Homo sapiens

<400> 144
ggcacgagaa acaattagcc gagcgaggtg gtgcacgcct gtaatcccag ctactggaga      60
tgcaaaggtt agccaggtgt ggtggtgcat gcctgtaatc ccagctactt gggaggctga     120
ggcaggagaa ttgcttaaac ctgggaggtg gagattgtgg tgagctgaga tcgtgccact     180
gcactccagc ctgggagata gaacgagact tcctgttctg ttgttttttcc gttttgtcaa     240
aatatctcct atgttcttgg cttccttttc gtcgccaggt tttcagcttt cctttagctc     300
ttcttctaat atggcttctg cccacaaaag cctgctctgt caggatctca tggttctcca     360
cttgccagaa ccttcttcag cctcagttcc tcggcctcaa cttgtacgtt taacccattg     420
accaccaccc cccaaattca ccttcatttc tttgaccctg ctcctcactc cttttctgtt     480
gaggaatctg ttgactaact ccaggctcac tcaggctcac cgtcctgctc tctgcaccag     540
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gattttttaga cctaaatggt ttccttaacg ccattctaac tgcctgtgac tcattttcac     660
ttacagtgtt tattgtaacg ccaaaccaac aaatcacagg tgcttgcttc tctccataaa     720
tctccccagt ctaacttttt gtcattcaac atgactcgtt tatccaacct gaaatcgcat     780
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ctgctatgaa taaaaagaga tttcagttct cttcactttg aaatctaaca actcagagaa     900
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tgtgatttct gtcagcatat cttaggtttg tttgttatga aacttacgca gtgtgaggtt    1080
ctatctgaaa atgttatttta gctatcttct gggactattt aatgaaagtg gggtcatgaa    1140
tccttaaaat tcttgtgcgc tttgagaaac atttctgtta tttgggtatc agtttgtaag    1200
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tgtggtaaag ccaagatgga aacgagcact ttgctttctt ggttgttgtt actggtctaa   1260
cctgcttgaa ctagtctgct gtcctgtcaa atgcatcttt ttatttacat gtcccttaaa   1320
ttaaagctga tcatgaaagt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1380
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<210> 145
<211> 1048
<212> DNA
<213> Homo sapiens

<400> 145
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accccacact ggggccctcc tcctgggcct gaccagtccc ccagctgtca cctccccatt    120
cctggacagg aagggcactt ttcctagtga actggccata gatggttttg gatggttcca    180
tctgttctgg caggagtggg agcaggagcc agggcagaac aaactgctgg aggccctggt    240
gttgggaaca gctgcgggga gggtagggac cagacagaac tgccttcaag atgagtccca    300
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cccatgggcc cccagggccg agagggagga cagagccctt cagaacagag gcctcatctc    420
actgcatccc ccatcacccc ctagttcccc aatggtccta atttgtgttc tgagatccca    480
gtttactccg tggccaggcc ccacctgtgt ttccaagtcg ggctggagac gcaggatggg    540
gtaggccttg tgctctgagc aacccccagct ctgcctcaca ggcaggcagg cccggtgcaa    600
gagtggactc tgggttccta aagcaataaa tgcaaacaag ccaacagctc tgctgcctag    660
caatttccat cttagccaca cttctcccct caggggcttc ggaggagagg tcagggctaa    720
ggccggggat gagactgcag gagagagagc agcggagggc cacattcgga gcctccgtcc    780
actccagttt tatcagcttt tgccttttgc acggagtgct aaacaaattc tagctctgtg    840
ttttttttccc attcccagat ttactatcag ttctccttaa aaagtatcta agctgttaca    900
gtagctttcc cttcacttga ttctattgtg tgttttctat gtttggaata attacaccca    960
aatatctaga tattttctct tcaccgcatt ttgtaaataa agagatgtgt atgccwmmmw   1020
raaaaaaaaa aaaaaaaagg gcggccgc                                      1048
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<210> 146
<211> 1882
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1407)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1412)
<223> n equals a,t,g, or c


<400> 146
gaattcggca cgaggtaaat gtggtgtttc tcctagctgt gaactgtgtc ctaatcagga     60
tggaattttc aaggagacag atgctggaag atgggttcat attgtttgtg ccctgtatgt    120
tcctggagta gcctttggag atattgacaa attacgacca gtaacactaa cggaaatgaa    180
ctattccaaa tatggtgcca aggagtgtag cttttgtgaa gaccctcgct ttgctagaac    240
tggggtttgc attagctgtg atgcagggat gtgcagagcc tatttccatg tgacctgtgc    300
tcaaaaggaa ggtctgcttt cagaggcagc ggcggaagag gatatagcag atccattctt    360
gcttattgta agcaacatgc agataggtta gacagaaagt ggaagagaaa aaactacttg    420
gctctacagt cctattgtaa aatgtctttg caagagagag agaagcaact atcaccagaa    480
gcacaggcaa ggatcaatgc ccggcttcag cagtatcgtg ccaaagcaga actagctcga    540
tctaccagac cccaggcctg ggttccaagg gaaaaattgc ccagaccact caccagcagt    600
gcttcagcta ttcgtaaact tatgcggaaa gcagaactca tggggatcag tacagatatc    660
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ccagctctca ctgcagattt tgtgaattat tattttgaga gaaatatgcg catgattcaa    780
attcaggaaa atatggctga acaaaagaat ataaaagata aattagagaa tgaacaagaa    840
aagcttcatg tagaatataa taagctatgt gaatctttag aagaactaca aaacctgaat    900
ggaaaacttc gaagtgaagg acaaggaata tgggctttac taggcagaat cacagggcag    960
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aagttgaata taccggcaat tttgcgagca cccaaggaga gaaaaccaag taaaaaagaa    1020
ggaggcacac aaaagacatc tactcttcct gcagtacttt atagttgtgg gatttgtaag    1080
aagaaccatg atcagcatct tctttattg tgtgatacct gtaaactaca ttaccatctt     1140
ggatgtctgg atcctcctct tacaaggatg ccaagaaaga ccaaaaacag ttattggcag    1200
tgctcggaat gtgaccaggc agggagcagt gacatggaag cagatatggc catggaaacc    1260
ctaccagatg gaaccaaacg atcaaggagg cagattaagg aaccagtgaa atttgttcca    1320
caggatgtgc caccagaacc caagaagatt ccgataagaa acacgagaac cagaggacga    1380
aaacgaagct tcgttcctga ggaaganaaa cntgaggaaa gagttcctag agagagaaga    1440
caaagacagt ctgtgttgca aaagaagccc aaggctgaag atttaagaac tgaatgtgca    1500
acttgcaagg gaactggaga caatgaaaat cttgtcaggt gtgatgaatg cagactctgc    1560
taccattttg gctgtttgga tcctcctttg aaaaagtctc ctaaacagac aggctacgga    1620
tggatatgtc aggaatgtga ttcttcatct tccaaggaag atgaaaatga agctgaaaga    1680
aaaaatatat ctcaggagct caacatggaa cagaaaaatc caaagaaata aaagattttc    1740
tgtagtgttt ttgaaaagtt tgcagcttat gtaatagcag ataaaatttc taattgtaaa    1800
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<210> 147
<211> 2254
<212> DNA
<213> Homo sapiens

<400> 147
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gggccgggtg cgcaccgtgg ccaacgtcac agtcaaaggg cccatcctga agcgctgccc     180
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ggggtcgagg gacgctggag ccgtgatggg gaggagctgc cggtcatctg ccagagcagc     300
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acctttagcc tgggcaactc ccgtaccact acgcttctca gagtaaaatg tgtcaagcac     420
agtcccccag gacccccat attggcagag atgttcaagg gccacaagaa cacggtcctg     480
ttgacctgga agcctcccga gccagctccc gagaccccat tcatctaccg gctggagcgg     540
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gaggtgccgg gcgactgtgt gccctccgag ggtgactacc cgcttccgca tctgcacagt     660
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aataaacatg caaataaatg tacaacgtcg tgactgggaa aaccctggcg ttacccaact    2160
aatcgccttg cagcacatcc cccttttcgcc agctggcgta atagcgaaga gcccgaccga    2220
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94
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<210> 148
<211> 284
<212> DNA
<213> Homo sapiens

<400> 148
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atgggcattt caaataggca agcattgaat tgtaatgaca aaaaggctat tttatattaa   180
ggatatatgc atttgtattt cacacaccag agatgatatt aaacactgat tattttatgc   240
tgctgtttat taaaaatgtt tactataaaa aaaaaaaaaa aaaa   284

<210> 149
<211> 1615
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (591)
<223> n equals a,t,g, or c

<400> 149
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ttacctcctg atacctgctt actttctgga agtagtgggc aagtaagatt tggctcttgg   180
tttctaattt ttaaatttct gaatactgcc ctagtctgaa cttggccttt atagattaat   240
ctttgcttca cattttttagt gttgtattta aactatttta taatttaaaa atagattcta   300
atctgaagat acttttcaag aaatattatt aactgatgtc atcctcatcc cagcagctca   360
tctgttagga atgaagttga gatgcttcta ttccatgttt ttgtatttgg gaaggattca   420
aagttgaagg tttattgtcg ttgggttttt cagatggtga catgtaaact caggatagca   480
aaccctaatg ttcacacagt gctctgcctc tgcactcagt tgggatagtt gctccytttg   540
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aggacttgtt acacctgaca acctatagta tatttgcttt ttctcacaaa atgaaaccaa   720
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attagattga aatctcttct gacctagaac attttacttc aggcattcag cagatttcag   840
aaagaattac cttattttaa gttagtttct ttgttagttt actgtgtgtc tcttattcaa   900
taaacaagca gaatttgtgt cctgccctat ccatgtctta aagatgagaa gttggatcca   960
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cataaaacac atcacatgtc attgactgct ttttagaaat acacttccaa ggcagtacat   1200
ctgtattgct actgaaaagt gccawttcac agaacacaga cttctttttg cyctttgaca   1260
tcttgaaaac atctgttttt cttttttaat acmaaacttt gtgctcaaga cmaatcttac   1320
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ctcctaggaa ttctggagtt tgaaacaat tgctctatgt tattcctgct tccagtctct   1500
aagtaacaag ggcatttaaa agcatagtct cttaaggtcc actatagtgg ttctttattt   1560
aaggaataac tcagctgggt gcagtggctc acgsctgtta atcccagcac tttta   1615

<210> 150
<211> 1245
<212> DNA
<213> Homo sapiens

<400> 150
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gtccaaaaag ccagtttcct ttctggtgtt tgtgggcata cactttgttc tgctcctgag   120
taagtcacac tttgtcttcc aggtcctcta ggatccctgc aatgttccat ttgttgcctg   180

95

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ggcattggag taatagcagt gcttggtgct acagaaatag atggatggaa gttgtggtta    240
ctgtgacacc aaaaacttgt cccctgagct ccctactcct ctttctccta tattttttgg    300
taattggctc tgtcattcac ctcactgcag gattcagaat cctggtactg ggtcttgtat    360
ttctcttttt cccttaccct ccttatccaa attgtcacca agttctgctt catgctctca    420
tgatttctca cctgagttac cctagtagct tccaaatagg gccctctgat ttcaaccttg    480
gacactccca ctatctttta tattatggaa agatctaatc atgttacccc ccatttaaaa    540
tccctcagag agcactgcag atacaattca agccagttag cttagtgtta aggttttaca    600
tgcatttctg cagccatctg cccctattct tgcaccctaa taatgccaaa cttcttttag    660
gccttaattt catcatctgc aaaatgagga taataaatag tacctacttc atatgattgt    720
aataaggscc ctcaaaactg tttcatgcct cttttgccca ctgcattagg ctgttctcac    780
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gctcagaaaa cttacagtca gccgggcaca gtggctcact cctgtaatcc cagcacttgg    960
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taactccagc tactcagaag gytgaggcag gagaatcact tgaacccagg aggtggaggt   1140
tgcagtgagc caagattgcg ccactgcact ccagcctgga caacagagtg ggactctgtc   1200
tcaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ctcga                   1245

<210> 151
<211> 1961
<212> DNA
<213> Homo sapiens

<400> 151
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ggtctgcttc catttattca ctagccatca ctacaatcac cagcttttaa aacaacagct    180
accagaaata caaagagtgc cattggaaca gctgtgtcta agaattaaaa ttttagagat    240
gtttagtgct cataatctcc agtctgtgtt ctctcggctc attgaacctc cacacaccga    300
ttctcttcgt gcctcaaaaa tacgattacg agacttagga gcattaactc cagatgaaag    360
attgacccct cttgggtatc atttggcctc tctgcccgtg gatgtgagaa ttggcaaact    420
aatgttgttt gggtctatct tccgctgttt ggatcctgct ctcaccattg ctgccagttt    480
ggcttttaag tckccgtttg tatctccctg ggataaaaaa gaagaagcta accagaaaaa    540
gctggaattt gcattcgcaa acagtgatta tctggccctt ctacaagcgt ataagggatg    600
gcagctaagt acaaaagaag gcgtgcgtgc aagttataat tactgcagac aaaaacttctt   660
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agaaggaaaa tttcagaaga ccagtactgg agctgtcaga atgcaaccaa aatcagctga    960
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agaacagaga aggggaaaaa aaacccaaaa ttatgtgaac aagcaaaatt aaaatttcat   1860
tttaggctat tggctactga gtaaacttga cttgtgaggg gtttttattt ttactcatta   1920
aaagtcaact taaaaaaaaa aaaaaaaaaa aaaaactcga g                        1961

<210> 152
<211> 936
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<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (699)
<223> n equals a,t,g, or c

<400> 152
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ccccccaaag tggttgatcg ttggaacgag aaaagggcca tgttcggagt gtatgacaac   120
atcgggatcc tgggaaactt tgaaaagcac cccaaagaac tgatcagggg gcccatatgg   180
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agtagaatgt tcgctgatga cctgcacaac cttaataaac gcatccgcta tctctacaaa   300
cactttaacc gacatgggaa gtttcgatag aagagaaagc tgagaacttc ggaaaaggct   360
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ttaggtttgg gcttcacacc acttgccttt tacagtctag ctatacctaa ttcctttaaa   600
aagaaaagtt ggtgagaatg ttattggcgc tttttgacat aatgctgtta tgtymatagt   660
gtttctaaag agccttccac actgaaatga aatataagna gaaaaatgga gtcatacttc   720
tgtactactc tcataaaata tttattaggc atattctctg agtaggaact ataggaaaaa   780
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<210> 153
<211> 3853
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (210)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3808)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3819)
<223> n equals a,t,g, or c

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cgtccctcta gaggggggaag tttgttgccc tggagaacat cagctgcaag attaagtcag   180
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cacgctgaac agacagaagt acaggcatgt ggacaatatc atgtttgaga atcacaccgt   300
cgctgaccgc tttcttgact tctggagaaa gacagggaac cagcattttg ggtacttata   360
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aggtggtcct gacaaccaag tccactttga agggtaccag gtgtccaatc agtgtatggc   780
actggtccgt gatgagtgtt tgctgccatg caaggacgcc ccggagctgg ctacgccaag   840

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acaactttcc ccaaggatcc agtttacact ttttctattt cgcaaaatcc atttcctatt   1020
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ggtgtgcatc actgggcttg gatttgcatt acattgaccc cagccctgca gtggaaccta   3780
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cgcccaaaag ggg                                                      3853

<210> 154
<211> 1357
<212> DNA
<213> Homo sapiens

<400> 154
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ataatacatt taaaatacct gtcaaagttt taaaatataa gatagaacct tcttttttg    120
ccttcttaca catgaatgta cttaaagtat tgttatgtga tcttgggata cttatttatt    180
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tttgaaattt ttgtatatat agcatttctg aacttagcaa ataatatgtg taaaggaatt    240
aaccaaaaat gaaagaactg gcattttcat atgggataca tatttgctta aactaaataa    300
aataacttag atttatttaa atcaggaata tttacgttgt tgatcatttt taaagtatat    360
ttgttcaaat attcctaatt tgtttttcag cacacttgtt taagttcttg cctttcaggt    420
atactacagc gttatatgaa cataatgttt taaaaaaatc ttggttgtag tttctaatttt   480
tcactgcata acaaatttga aaccaaatgt tgaatttctc tgtgagggta cttattttgc    540
ctacagtttc aaatatattt tcaaattcat ctctttctta ctagactgtg agctccttgt    600
ggacaaggat gttattttag ttataatgac aactttaata tctagcaaag tgccaggcat    660
agagtattcc tttattgaaa tgaattgata gatattgatt attaaaatgc tactacagta    720
ttctacgatg caggctgaat gtatattaca gtaattctct ggctaatttt aaaagtaaga    780
catagaaaac aaaacacctg tagcattttc tttatttaaa attgaaactc tgttttgaat    840
ccttttatt ttgtcaaaca ttctatgcaa atattgaaat atgcaacagc taaacttttat     900
ggtacatatt aattagtttt attttccttt tcaaaatcag aaatgctgta tttaagcttc    960
ctggaaatgt cgacaatcat tttaatgacc aaaggtgcta cttattttc aacattgacc     1020
ttgatcataa gtgcttctat ctgctgagct ttatttattg tttttggaca gaaagtttgg   1080
tgggaaggtt gcaataaaat cagaatctct cttgtctgaa ttatgcagtt taaccctgtc   1140
catgttcctc tgtactctat tcttactgta ttttagttat tgtttcttac ttatcactaa   1200
tttttactgc aggtctgtgc tgtttcttag aaagtacatg catatatatt tctataatat   1260
gtaagaaaaa acctgtattg cttattaaat taaaattaaa ataaaaaat tcatgttaaa    1320
tttttgaaat gaaaaaaaa aaaaaaaaa aaaaaaa                               1357

<210> 155
<211> 810
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (43)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (54)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (59)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (88)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (806)
<223> n equals a,t,g, or c

<400> 155
ggaangagcg ccccaattac gnaaanccgg cttttttccc ggnggggttg gccnggatnc   60
attaatgcca gctggcacgg acaggttncc cggactggaa aagccgggcc agtgagcgca   120
acgcaattaa tgggggggttg gctcacttca ttaggcaccc caggctttac actttatgct   180
tccggctcgt atgttgtgtg gaattgtgag cggataacaa tttcacacag gaaacagcta   240
tgaccatgat tacgccaagc tcgaaattaa ccctcactaa agggaacaaa agctggagct   300
ccaccgcggt ggcggccgct ctagaactag tggatccccc gggctgcagg aattcggcac   360
gagccgagaa ggcccttaac tcaaagtagc ttatttatcc aaaatgttct ggatgcatca   420
tctccaacca aggacccctt atttatcatg cctttgttct cttttccctc agatgtatat   480
ttctttaaaa ataattttcc taataacaaa acttatttct aaaacagctt aaaaattcaa   540
agaaaaaccc caaacactga cattacctac acttccacta cccaaagaca aaatgtgccc   600
actgtgtgct tttgagtgta ttttctttta gtttgttttt tgttgggtgc atatttatga   660
taataacaat gatggacttc aattgtactc actgttctat tgttggtttt aattagcagc   720
aagttgtgat cactttccca ggtgaataaa tcatttcaaa gcaaaaaaaa aaaaaaaaaa   780
aaaaaaaaaa aaaaaaaaaa aaaaantcga   810

<210> 156
<211> 811
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> n equals a,t,g, or c

<400> 156
ggcacgagct catccagaga tgnactgggc acaggaaag cttttttttt caagtagcag   60
ctgctattca ttgaaatgtt acaattttcc tgccttagta tttcacacgt ccttatactc   120
ctcataacat tttttgcttg tgtagtttta gccccatttc agaaatgagg aacccaggtt   180
cagaaggttt agaagcttgc tcaagacccc ccagctatta ggtgccagag ctgcaactgg   240
aatgcagctt tgactccatt gtgggtttct gttccattat caagagtagc ctgacagttg   300
gcaataacaa tgactgaatg aatgaataaa tgattctcca agaaaatag ttcatgtttc   360
cctagtatga gggaatactt gagatagttg ttttgagaag ggggccacag accaggagac   420
accaataagt ctttctcatt tctggtaaat cgctttataa tgaccgttat tataaagtgt   480
aaaaacaaca acaacaaaaa ataataggcg cagtggttca cgcctataat cctagcactt   540
tgggaggcag aggcgggcgg atcatttgag gtccaggagt tcgagaccag cctggccaac   600
atgatgaaac cctgtctcta ctaaaaacac aaaaattagc cgggcggtgg tggcgcgtgc   660
ctgtgtagtt cacagctact cgggaggctg aggcaggaga atcgcttgga cccgggaggt   720
gaaggttgca gtgagccgag attgtgccac tgcactccag cctgggagac agggccagac   780
tccatctcaa aaaaaaaaaa aaaaaaaaaa a   811

<210> 157
<211> 1010
<212> DNA
<213> Homo sapiens

<400> 157
cttaaaatgt gaagaaagtg tgaattttag ttttgtcaca gttaactgtg tcaaagagaa   60
ttaaaaaaaa aaacttcaga ttttgtttac atattttact acattttgc tggtataatt   120
ccttagccac ctatgtacat actgctttaa gaaatgtttt tttcctgttt atttctgttt   180
ggtttatatt ctggttgtct ttttcttttt gtaaagagga aacaatgtac agaaaaacaa   240
taaactggtt gtatggccat agctatccga aaagcaagag acaaagcaag acaaatattc   300
acacaaaaat gaagtgtgtc ctctggaggg tcatatatac aatttctttt gtacagatga   360
aaatcaatca gctgcttaga tttagaaatc tactcttgct ggtctttgta agttgcatga   420
atatttgact ttgaaaaaat atcttaacga catggggcaa aaagtgcaat ctaaatggta   480

```
gcctttacta atgtgtgtgg aaagaggtgt tcctcattat ctaatatttc aatgtgttaa       540
gagtttaatt tttttgttat cattaaaaaa gacaggatta taaagagata tcaaagcacg       600
attttagata acctaaacgg cccagcctat acgaagttga ttatatctcg atgtctgtaa       660
aagattgctg ttcttggagt cttgaggtct tgtgaattga tttcctgctt tctttcattt       720
ttttcaattt aagtaataat acatttgtta tattcctttc agtgtaagtt tctatttgga       780
caattttatg ggaacatgtg cattctctat gtgagcttct atcatattcc tgtttttatta      840
gcagaaccta aaggaattta tttaatgatg ttgtgacatt actgcttttt cttttttctt       900
ttcttagttc atatttgcat tttcgttcaa ggatatgctt agcaataaaa tgttcttccc       960
aaaaaaaaaa aaaaaaaaag aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                   1010


<210> 158
<211> 1199
<212> DNA
<213> Homo sapiens


<400> 158
ggcacgagac ccattggaga tcttcaacct ttaccgattc aaaagggggga aaagactttt        60
gttttgacac cagaacttag tcctgggaaa cttcaggtct tacctttttga gaaagcctca       120
gtatgtcatt atcatggaat tgaatattgc ttggatgacc gaaaagcttt ggaaagagat        180
ggaggatttt ctgaacttca gtctcgtctt attcgttatg aaactcaaac tacctgcacc        240
agagaaagtt ttccagtacc tactgtgttg agccctcttc catctcctgt agtttcgtca        300
gatcctggaa gtgtccctga cggagaagtt ttacaaaatg aacttcgaac tgaagtatcc        360
cgactgaaac ggagatctaa agatctgaat tgcctttatc ccagaaaaag acttgtgaaa        420
tctgaaagtt cagagtctct tctttctcag acaactggta atagtaatca ctatcatcat        480
catgtgacat ccagaaagcc acaaacagaa cggtccttac cagtgacttg tccattggtt        540
ccaattccta gctgtgaaac tccaaaactt gctacaagaa ccagttcagg tcaaaaagt         600
atgcatgaat caaaaacatc aaggcaaatt aaggaatcaa gatcacagaa acacacacgg        660
atactgaaag aagtagttac tgaaaccctg aagaaacaca gtattaccga gactcatgaa        720
tgtttcactg catgcagcca gcgtctcttt gaaatctcta agttctatct aaaggatctt        780
aaaacttcaa ggggtctatt tgaagaaatg aagaaaacag caaacaacaa tgctgtacag        840
gtgattgact gggtattaga aaagacaagc aagaaatgat acataatcat tctctttaag        900
acaattataa attggatgga gctattattc actacttctt ttcttagttt gaaaattata        960
aacaaatttt aagctttatt caaagaatag atgttatatt tctaaagaat ttcatgaata       1020
tatattctat atttgtatag tttgagggat gctatgttaa tgtattttta attagataca       1080
tattttgtaa agtgttacta tattttaaag ttatttttat atgtttaaa atgtttactc       1140
ttatttaatt attacaataa acagaatttt tttttttta aaaaaaaaa aaaaaaaa          1199


<210> 159
<211> 434
<212> DNA
<213> Homo sapiens


<400> 159
cagaagacat accagtcaat gggttcttga aatagtcaag gaatgtggca attcacgctg        60
gatgtggaag gtggaaggaa agacaagtgt tagcaaatgc agacctgtct gctgtggaac       120
ttgaagacct tgctagtagt caggctgctt cctggcattc caggcctgar aggcttctat       180
tttgactcaa agcaaaaaca aatgctatgt taatgtcttc ctatgtgtcc ccttcataag       240
attttggtga aatcatatta aaagtgcatt tctcagtatc actctcagtt atttagagat       300
ttcagttccc cagtaccctg gcaagggatt tgacgaacgt agcaagaacg tcgtgaactt       360
tgagctaatt tatatcatgt tcattgtctg ttaataaata aaagccaaga aaaccagagc       420
aacaaaaaaa aaaa                                                        434


<210> 160
<211> 716
<212> DNA
<213> Homo sapiens


<400> 160
ggcacgagca ggattccgtc tcacaaaaaa aagaaaagaa aagaaaaaag agaagagaaa         60
agaagaaaga aagaaaggaa attttgtcta atagttgaat ttactccatt tatatgtatt       120
ggtataacaa acattttgga gcctacatct taccatattt catgttgtat ttgtattgta       180
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101

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attcttttt  attatatggt  ctgttctatt  ctttcttttt  ctattctccc  tttctgggaa   240
gactttggta  tctctttttt  attttcctt   tttttcctaa  gggaatggca  aatagtgttc   300
tcacaggttt  aggagcggtg  gagtagaatc  taagaaactg  agatgaaagt  acatgaacca   360
tgcaggttca  gaaattgaca  atgcagctta  tggtgtagag  agagatttac  aacgctatta   420
acttttatg   tggattcttt  gctttatgtt  aaagtctttc  tttttgttct  cttaaattgc   480
cttcacagat  aatttaagcc  tgtggctctg  gtctgtggat  cctctttcat  cataatcctg   540
aaacatcatt  tgtctttttt  actgatggta  cagaaagcaa  tgatggatga  taaaactgat   600
gatgccttac  catgagtcaa  ggcagcggca  ccaaactgta  atagtaaatg  tagtaatagt   660
cgtatgttct  ttagtaagaa  ccaagcactt  cagtaaaaaa  aaaaaaaaa   aaaaa        716
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<210> 161
<211> 2503
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2497)
<223> n equals a,t,g, or c

<400> 161

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ggcacgagcc  caaaccccaa  ctctcagact  tacctcccaa  accacagatg  aaggacctgc    60
cccccaaacc  acagctggga  gacctgctag  caaaatccca  gactggagat  gtctcaccca   120
aggctcagca  accctctgag  gtcacactga  agtcacaccc  attggatcta  tccccaaatg   180
tgcagtccag  agacgccatc  caaaagcaag  catctgaaga  ctccaacgac  ctcacgccta   240
ctctgccaga  gacgcccgta  ccactgccca  gaaaaatcaa  tacggggaaa  aataaagtga   300
ggcgagtgaa  gaccatttat  gactgccagg  cagacaacga  tgacgagctc  acattcatcg   360
agggagaagt  gattatcgtc  acaggggaag  aggaccagga  gtggtggatt  ggccacatcg   420
aaggacagcc  tgaaaggaag  ggggtctttc  cagtgtcctt  tgttcatatc  ctgtctgact   480
agcaaaacgc  agaaccttaa  gattgtccac  atccttcatg  caagactgct  gccttcatgt   540
aaccctgggc  acagtgtgta  tatagctgct  gttacagagt  aagaaactca  tggaagggcc   600
acctcaggag  ggggatataa  tgtgtgttgt  aaatatcctg  tggttttctg  ccttcaccag   660
tatgagggta  gcctcggacc  cggcgcgcct  tactggtttg  ccaaagccat  ccttggcatc   720
tagcacttac  atctctctat  gctgttctac  aagcaaacaa  acaaaaatag  gagtatagga   780
actgctggct  ttgcaaatag  aagtggtctc  cagcaaccgt  tgaaaggcat  agaattgact   840
ctgttcctaa  caatgcagta  ttctcaattg  tgttactgaa  aatgcaacat  tagcaaagag   900
gtgggttctg  ttttccaggt  gaaactttta  gctccatgac  agaccagcct  gtagttatct   960
gtgtacacag  tttacagcta  caaaaaccta  ctttggtatt  tattacagaa  aagtgctcag  1020
ttaaatgtaa  gtgttattcc  ttcagcaaaa  tattcactga  cccaaaactc  tttatggcat  1080
tttacaatgc  acacagcctc  atgcaagttt  agacaagtgg  atttatactg  tcttatgagt  1140
gcccgcccct  gatatattac  ctcattatgc  aaaaataaca  tatctttcat  gactattttg  1200
acaaaagttt  aaaacacata  tgaagttcaa  atttcaggaa  ccaaggactg  ccagaaaata  1260
ttagcctcta  cattacgcat  gcatttagaa  gcttacctga  aatctgcctt  ttataaagga  1320
atagtatgga  taagtggaat  tgtacatttt  ttaaacttga  ttgccattaa  agcagaaatt  1380
ataaggttgc  aacaatattt  gtttctaatc  actggctttc  tcaagagtat  ggattgacat  1440
attgtgttat  gaatgcacat  ctctcagatg  tgttgaagca  tccattgcat  ccatttttta  1500
ttattttctt  agttttgttc  ttggacaaat  ttaaactttt  aaaagattat  tcaagatgaa  1560
tttaaaagtc  aacccttcac  acagtttccc  tactgtatgt  agaatccagg  tgctgaaacc  1620
aagtgtttct  tttcccatgc  tctttgttaa  accccaatta  tagataattt  ttccagtctt  1680
aagctctgtc  caccttcaag  tcaattcata  accaagtttt  tgaacgctgc  tatgaattgc  1740
actgtgaaaa  gcactcttcc  ctctcagttt  tcttttcatc  ccagccatgt  ttatcagatc  1800
cttaagaaca  ttgtatttca  gtcttttaca  tcagtctgaa  ttttggaaaa  gaatgcaata  1860
gttgtactcc  acagtcagtg  gaactgttcc  ctgagtccga  ggctcatgtg  tcattctggc  1920
actacatttg  cttaaattgc  tattttggca  acagcacaga  aaactaatat  ttttaagcag  1980
agaatcttgg  caatgagtga  gagatgttaa  tttcacagaa  gcacaactcc  caacccaacc  2040
cttaggaaaa  gccctcttcc  atcgttacag  tgctcagtga  atattaattt  agttctgctt  2100
aagtggttgc  tatacaaact  ttgaatagcc  acctaataaa  taaaccttgc  atgacaaacc  2160
tgcaaaatat  tttatcagct  gttattggaa  agtgattta   agcaattgct  tcctcagtgt  2220
cagggcacat  gtgaatttcc  acaccaaaca  gagcatgagg  aaccagttga  catgctgggt  2280
tgtgactggc  agctttagca  gcctcggtac  tgaagccaca  ccagtgtccg  gatggaagtc  2340
tgcatctgag  gttgctcagt  gtcccggtca  ttcatttaca  cattttaact  tgcattaaag  2400
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102

```
agctgttctt ttctgtggcc tagactcttt tcactgatct caaaataaac tggttttttt   2460
caaaaaaaaa aaaaaaaaac ycgggggggg gcccggnacc cat                       2503
```

<210> 162
<211> 1108
<212> DNA
<213> Homo sapiens

<400> 162
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ggcacgagct gggtgaaaag tagaatataa actcggtaga cttctggtcc cttcattggt     60
catggaatgg accagtgctt gcttcattga gcaacagttc tgttgttcag aattcctgga    120
tttcacctca cttctgctct ccctgcaggt gaatgtgatg ttcatgcttg ccattcttct    180
gacattcttc cacccctttc tggtatatcg ggaatgccgt acttggaaag aaagtccctc    240
tgcaattgca tagttcagaa gccctcactt ttcagccccg aggatggttt tgttcatctt    300
ccaccacctt tgaggacctc gtgtcccaaa agactttgcc tatcccagca aaacacacac    360
acacacacac acacacacaa aataaagaca cacaaggacg tctgcgcagc aagaaaagaa    420
tctcagttgc caagcagatt gatatcacac agactcaaag caaaggcatg tggaacttct    480
ttatttcaaa acagaagtgt ctccttgcac ttagccttgg cagacccttg actccagggg    540
agatgacctg ggggaggaag tgtgtcaact atttctttag gcctgtttgg ctccggagcc    600
tatatgtgcc tggatccttg cccacgggtt aaattttcag gtgaagagtg aggttgtcat    660
ggcctcagct atgcttcctg gctctccctc aagagtgcag ccttggctag agaactcaca    720
gctctgggaa aaagaggagc agacagggtt ccctgggccc agtctcagcc cagccactga    780
tgctggatga ccttggcctg accctggtct ggtctcagaa tcacttttcc catctgtaaa    840
attgagatga attttggtgt tgaaagttct tcctggagca gatgtcctag aaggttttag    900
gaatagtgac agagtcaggc caccccaagg gccatgggag ccagctgacc tgcttgaccg    960
aaggatttct gacagactat ctttggggat gttttcaaga agggatataa gttatttact   1020
ttgggcattt aaaagaaaat ttctctcggg aataatttta tagaaaaata aagcttctgt   1080
gtctaaggca aaaaaaaaaa aaaaaaa                                        1108
```

<210> 163
<211> 930
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> n equals a,t,g, or c

<400> 163
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ggcacgagcc aatctctgtt ttcagagatt gttttattat atgctttaag tccacataaa     60
tgatctcata ctgaatgtgt cactgtagga ttttttcttc aaaattgtat ttttgaactt    120
tctgtatata tatatanctt taattttaac cattttatga attgtaaagt ttatgtattt    180
ccccatctta atatattatt cccagttttt tgattacaag caatgtaatc taaaagtaca    240
ttttgtatg gatttcttct gtatatgtgc aatattttgt ctagggtata tacctagaag    300
tggaattgtt gttatagagt gtgtgctttt tcagctttac cagatattgg taaattgctg    360
tctgaagcaa atgtagcagt tcacactgct gtctagaatt ttctcatatc cttattagat    420
tttgaattgt cagaccctgc gattttact cttatgatgg ctgtgatatg cttttgttt    480
taatttgtac ttcctttatt atttatgggg ataaatatat ttccatgttt aataagcatt    540
tggatttgtt cttctgtcaa caacatatat aaatctttgt caccaaatca gctttttga    600
ggtatgactt acatgtaata aaatgtgcca attttgattg taccattctc tgagttttga    660
caaatgtatg aaactatata tccatcacca caattgagtt acaaaacatt ttcagaatgc    720
caaaaaatgc tccattgtgg taactgtctt ttcccccatt gaattaattg tcttggtaca    780
atcgttgaaa attggttgac cacattatat gtgaatgtgt ttctggattc tattattctc    840
ttgatctata attatgccaa taccacactg tcttgattac tgtaacttta gaataaatct    900
tgaaagtaaa aaaaaaaaaa aaaaaaaaa                                      930
```

<210> 164
<211> 794
<212> DNA
<213> Homo sapiens
```

103

<400> 164

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ggctaggcag agtgaccttt catctgatgc taagccccta caagtttgag aaggtaagaa      60
aagatgaagg agacatatat taggtcagct cttacttttg aaaatgtttt atttgaagaa     120
acacctgtag cattgaggtg actgaatgcc tccacttatt tcaggaaaac gtatccaaaa     180
aaagttgaaa tatttggaca actttttttt taagtgccat cgatttccct agcagcattc     240
taaaagatag caagtaaaat gatgtttgtt atcctaaatg ctttagtttt aggtcattta     300
ttaattttct tacaggtgca ctttctagta catgaagtat cctttgtaat taatgtgtgc     360
catatgttta ttcccattta gtataactat aaattatatt ttaaattata tatttttagg     420
atagttatat ttttttgggg ttctacgaca ttgaagttgg actagtgatt tatttgaatg     480
ctgaatccta gtataggga atataatctt atattttaac aggggtcctc tatgggaaaa     540
taggatgaac tttgtttccc agaaattgtt aagtgatgaa aaacttcaaa ataattttcc     600
tgcattttct gctttattta catgtaaagt gaattccctg aaaattggat ttaaaaagca     660
ttctccttca atgtgccttt accttggagc tttaacaact tttctgttaa atatgtagtt     720
ttttattaaa caatgttatt aaataaaaac atttatccac tgaaaaaaaa aaaaaaaaaa     780
aaaaaaaaac tcga                                                       794
```

<210> 165
<211> 1145
<212> DNA
<213> Homo sapiens

<400> 165

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ggcacgagaa acagtttaaa ttctggatat aggatctcct atagcaaaac attttacttt      60
catttttcag tatttgctgc tttctagaat tctattagat aagctatgtc attttttctga    120
aaaagaaact gagttattga gtgtattaag acaaggcact gagaactaca gtgtcaaaat     180
caaagggcat aaatgggcat ggcagtgctg gtggaaaaat ctgtggtact ggtgatctgg     240
ttagggcctg ttgcacaggc tgggagtaac tggtttgctg tttcaagcct ccaagagtac     300
cttaaacaag gtgatagctc ctctcttctt tagcattata ttcctttagt caacaaagaa     360
ctttctccac tctgctgccc agctctgaga gtatctgaga tgagaatagg atgtgtgtgg     420
aggggctttt agggaagaaa gggtcataaa tgaatagaag tacagtctga aacatgaatt     480
aaatatcctt cctcaagtta taaggatac tttaatagaa cacagtctcc agaattcgct     540
gctatcacac caagtcatgc tgttgccctg tgacctcaca cttcccattc catggccttg     600
tcttggcagg gagtaaaaaa tcccacttct ttttactta gtgggtctca actgcagcat     660
ttcagaaaca aattttgatt tgacactcag gagaataaaa acaagttgag ggcagaatgt     720
atttggaaaa gcttaagaca aatttactga tattatttta tgatcattta ggattacaga     780
tcaatttacc tccataaatc tttgaattgt cactgtgacc acaggatgaa aatcctttat     840
tagccatttt ataggttaaa acaaaaaatt gactacacag ccgacttccc tcagataact     900
atgaagtcta ttatgagtac tgaatgacca agaacatgg aaaaaatgca tatgaataaa     960
tactgaaatg tttatgaaag atatttatga aagatattaa gacttctgtg tttaggtatg    1020
cacatatgat aaaataaatc taaaaacatt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1140
aaaaa                                                                1145
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<210> 166
<211> 1927
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1899)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1922)
<223> n equals a,t,g, or c

<400> 166

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ttacattttt catggagtcc ctgcttagtg cagtttccat tggaatgggt ggaagatgat      60
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104

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aaagctctct ttttatcta ctaataatgt gattgcaact taaaatagca aaacccaact    120
ctccctgtcc ctccaatccc tctcctaaaa agttcagttt ggaatctcat tctggaaaag    180
atggaatcgc atggagattc tctagctgtt aggtagacct aaataaaaag ttctcaatag    240
attcctcttt tgagtaaata taagacctct tgtagctaca atgttttaga gcatgtttca    300
tcttcatttt taatatcctg aactgaatga tagtgttttt ttagatgaag aactgatgtc    360
agcctgccag gtactgtaat ttattctatc atattattat attatatatc aagtaggaca    420
gtgaaaaatg tttccttgca aacttgtagt ccagtatcag ttacttccta tttttatcct    480
taaaagacca ttgcaaatca gtgtaagggt ttttccagta attactcaca gcactttgtt    540
aaagtttgca atttcttcag ccatttaata atatctttct gtgaagaaac tttgctgagt    600
taaccataaa tgttcattca ttgactgggt gggatgtgaa tggaatgtta gaaatgttgt    660
gtgaattgaa gttctgtatt cattatagat gtagccctta tttaaaaaag tgaattccat    720
actaaaacta ggaatgaaag tgagagattt ctaaactttt gcgaaagtgg gtcatttttt    780
gtttgactat aatagcagga agaattatag caatctgtca ttttacctga aacagacaag    840
cctatgtatt atgaatactt tcaagcttcc ctttggaata tacaagacat gcgtttggag    900
ttacctttgt ttttctatcg taaatttaga ttctggaatt ggggtttggt ggtgcaatgt    960
gttgctcaca agtggccaga actcctattc ctaaaaggat tttgagatgg aggaacacat   1020
atttaattcc cctttatgcc ttggttcttg ctcctctttc cacgttggat aacaattttt   1080
tggttgtttt gtttaagttg gtgctctgaa gcttaatctc agtacccttt actctgaatt   1140
gtcaaatttt gataaaacgt gccattttct ttggtaagag aaagcaggtc ttaatgtctg   1200
ccagaacaca atttatatgc cttattggct tcattaaact tttagaaaac tttagcattt   1260
gttacttttt tccattgcat ttactttcaa atgcacctaa tgaattygtc acccagtcgc   1320
aacttttccc ttctctgtcc cattgctttc tcctttcccc gacgcacaga ataaacatga   1380
agctcagcag tagaagcgta atgatttccc tcaggaaaaa cttctgacag ctaggttttt   1440
caagggtttc cctgtgctag ctgagatgca aaacaaatca tggaagattg catacctgtg   1500
tggtatttta aaaacaagtt gactttttca gtttcttgaa cggttaaggg tggatttaaa   1560
aactagacag tttagttttg gggaacagaa gctctcttcg tcttaagcca gattctctga   1620
ttcttttaga cgtcatagct ccttagttct gctcctgtcg ccctaacttg gcatgggcaa   1680
gttgaagttc atccttagac tgcagcgttc tgagcatggc tgaagtatta aaatgtttma   1740
tattttttag agcaaaattg atggaaagca tttggctgaa tctaaagacc tgcagtcaga   1800
ttcttcaatg tggtttaccc aactggagta gtgataaaca ccttaatcat aaaatgaata   1860
aaaacaaaaa aaccaaaaaa aaaaaaaaaa aaaaaattnc tgcggtccgc aagggaattc   1920
antggcc                                                             1927
                                                                    1927
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<210> 167
<211> 1316
<212> DNA
<213> Homo sapiens

<400> 167
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accacgctca gctcagcttc aacctgtctg caaagaaaag ttttaccaag accagaagtt     60
aaatatgrca tttcctaggt agttgtaact ctaacatagt ttaaaaagta tgtggcttca    120
gattgcctat actttgttca caaacgtgtg atttagatat gactgattta gaagtgaaca    180
acttggtaac atccctagac tccactcatg aacgcagaat tattacctgc tgtttgcttt    240
ctgaaagaat ttcagaaatc agagcaaatg tgtctttagg cagattcagc tccttttaat    300
attttctct tggcccactc tctttgcytc ccctgaatct gtgtggtact atagcagctc     360
tactctgtgc accatgctag gaagcttcct ttttggcaga atatgtttgg cagcaaagct    420
atagagacag gtgcattcag aacatcctgg gcaccagtca tgagtcttac tgtgtcaaaa    480
atctgaaaac acttgctgag aaccaaattt attccattgg aaaaaccctc tgtggagcta    540
taagcctctt ggactcttct tcctagatta aggcttgcat ttccctccct gtttcagtaa    600
aagatgatga aagccactat caatcctcac tgctgagtgg cagggagaag cagcaccact    660
ctcagctctt ttctaatctt gtaacttagt gctagaagtc tctccaggct attaccatgg    720
gcatttgttc tctgttggag ctgtaagcag atgaacccaa gtagagaaga tagatcttgg    780
aaggagagat ccattgagtc cagaagccag atcagcaaat ggaggaacct cggaggtgac    840
cagaaagatc tccatcggtt gcccaaggct gtaagtagtg atggtttag cgatgaataa     900
cgtaattggc tatgaagtac tgtggcagag ctgctgtttt ctgaaggtga gaagccattt    960
ttagctcaga gcaaccctta agagaacttt tggcagattt tgttggcatt attgaaatat   1020
atatagaaaa gttgctgatt gcaatggtta tgggaatgga atttaatgac atttgtaatt   1080
tattacactc attggttttt attgattata gtattgtctg acttttatt ttctactatg    1140
gttcctttag cagaaaagta acttttgtgc atatattgaa gtggtttttc agctatgaat   1200
tctttagggt agaaatttat ttagcaaatg tgaattcttt tgagaaagta tgaagttttg   1260
cagaaattga ctgtgaaatg tcagagaaaa ataaaagtca cttacttgaa acctaa       1316
```

105

<210> 168
<211> 1340
<212> DNA
<213> Homo sapiens

<400> 168
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ggcacgagtc aagatgagtt ggtagatcat cgtttgacag aaagggaatg ggctgatgaa      60
tggaaacatc ttgaccatgc gctgaattgc attatggaaa tggtagagaa aacaaggcgc     120
tctatggcag ttctgcggcg ctgtcaggaa tcagatcgtg aagaactcaa ctactggaaa     180
agacggtaca atgaaaacac agagctgagg aaaacgggga ccgagttggt ctccaggcag     240
cacagccctg ggagtgcaga ttctctcagc aatgattctc agagagagtt caacagcagg     300
ccaggtacag gatacgtacc tgtggagttt tggaaaaaaa cagaagaagc tccttcggcc     360
ccatctccat cctcagcaga tgacactgat tggcctcacg gggacttggg taagcaacag     420
gcggcattca ggactcttct caaccctgct gttcagactt gataagatct cagagtccac     480
aggaaagaag tcactgttgc aataaaagca cccgtagtag caaaaacata aacaaataaa     540
acttcccca catcacagat gattttggac aagattttcc aaccttgctg gctactttag     600
tttgggacct gttttttttc tcatttgatt ttgcttgtgc agaaaatagt ttccagcaca     660
tggattgatc tgagagagaa tgaggctcag ttgtggatag tctgtttttct ctgagcatgt     720
tggccaacta gtatcgtcaa attattgagt ggatcatctc ttggaaatgc agaacttctg     780
ccaccacttg gctatttgca cagtcatctt gttctgtgtc cttttatctc tcagaccaca     840
cacatctgga acgctgtggg catcttctgc ccatgggctc catttggcac ctgctgagcc     900
acagttgtcc tgctggatgt gctgtgcagg ttggtaggac ttgccccact gtcaaggcct     960
ggtctcatct gaaaagccct cctggacctc aaagaattct tcagacctca tagttacagg    1020
tcattatatc tactatgttg atttatcatc aggcacacaa cttctgtttc cttctcttgt    1080
gttatctgat agcgtccctc cttgagctca tcagaaaggt tttatgaaat gtgaaccatt    1140
ttgggaaaag ctgatcaatt tttcttccta gcttcccatt ttcaaatggg acatcactca    1200
tatccctttc agaatgttag gaactgcctc ccacattctt ccctgtcttt ttgggttttg    1260
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tcaaaaaaaa aaaaaaaaaa                                               1340
```

<210> 169
<211> 2097
<212> DNA
<213> Homo sapiens

<400> 169
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ggcacgagga gagacacagc aagccatcaa ctatggttaa ttttgaaaaa tggaaaagtt      60
ggattgggct tacagtcagc actcagttat ttgcaagtgt atttctttgc tttgtagagt     120
attttattg ggtgttaact ttgacagctg agagtgggct tgcaagaaca caatctaaaa     180
gtgtgtttca attgagtatc tctctagtag aataggagtt catcctgaaa agctgtgact     240
cattaaccca gtaaacatat acaaagtaag cttaaaacac tataaacatg agataaggga     300
aaatgaatcc agagttctca tattaatagg tagtgaaaca ataaggcttt ttagagcaga     360
ctttgttggc ataaaataac ctggcttcta tccctaaccc tttcctacct ttcctctccg     420
tcaacatgtc ctcatactga agacaaactt gtttcaatga tagtcttcat tttcaaaaac     480
aaaaaggcag gcagacagaa ataatgatgt tttcttgcac taagaaggta ctacttgtac     540
acatatatca aaacctcatt ctgcaaagtt tttgaaggtt tcaatgggaa atttgatttt     600
attacaaaat aaaacatttt ttaatgttaa agtttatata ttccatgctt gtttttctcat     660
tcactggcat ggatgatcag gagctgccta tatatgaagg cagaatcaga ctatcaggaa     720
aggagctggc cagggccaca gccagtcaag atctctgagc aacttagaga cattggtgtc     780
attatatgaa gcttgcattt aatacattta tacataatac atttgtacat ttaattcata     840
acgtctcttg gtcacagatg ccttatatat aaaataagtt gccagatctc taagattgcc     900
tagtacacct ttgtatctca tttgatgtga tacccagaag agatcattgt tttttgttttt     960
gtttttgttt tttcaagaag atccttcgtg atcaccatgc tgttctcatg gtaagaactg    1020
gagttatgtt tttaaatttg gaaatatgac atttttatgta gcactttata aaaagtgaaa    1080
gcgacaaatt ccaccgctgc ttaatactgc tttgcttctt tttattgaca tgatagataa    1140
atatgtatct acacagagta ataataataa accacagtaa acattctatt tctctatggt    1200
ctacagcatg ccagtaaata atatgtaggc caataataaa ttatcaatta cacattttttg    1260
tgttaactaa ttaaaagcat agtgtataag tgagtacact ctaattaact tgcttctgtt    1320
gcactttagt tttctacctg catatggact gcatttttttt ttttaacaca gtcagtatgt    1380
agaatgggat gtattcttct gctgctgctt attaaataaa gaaagcctga gtgttcttag    1440
```
```
                                                       106
```

```
atggggttat tctgagatga gggtcttagc ctacagttct ttttgaaatg aaaggtgctt   1500
tgttttttaa ttatattcat cttttcaggg taaatttgtt tttctgagtt tctcgtaatg   1560
ctcattttta catgctgcta ctagcttttt tttttaaaaa aagtaaaagt tgctgctttc   1620
taaaatatta attgccttat atttgaaagt gccattgcaa tcgtaagtag actatgtatt   1680
tcctataatg atgtctgata tttaaatagg aaatcagaca aacaatattc agaaagttta   1740
agcatataaa ctttttattt ttaacttgcc taaatccctg tattccaaaa cctgctgcat   1800
cataataaat atatctatat atatttagca taagacgtga tatttttaat ttctttttta   1860
aaaaattata tttgtctctt agagttaaaa ttttctttat ataatattgt catatgtcat   1920
agttttaata caattcacat gatttctatg tttcttaatg atattttgtt gtgtaaaatt   1980
gatcggattg attaaaaaac aaattctctg gaatttgtgc gttcatgctt tttcgtattc   2040
tttatggctt ttaaataaat atacaatggt taatagtaaa aaaaaaaaaa aaaaaaa      2097
```

<210> 170
<211> 958
<212> DNA
<213> Homo sapiens

<400> 170
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ggcaagggaa atctgtaacc tacatactga gctcactgct gtcaccaaag ctttctacct     60
gtgtctgctg ttgtatgcta actgggacat tgttcccagg attccatgta cgattgtggg    120
cattgtcacc tgcacaagca caagaatgcc tggtcggggg tgaatggagc tgatatccat    180
ctcacactga gtcaccaagt cctgtacttc agagattgac ccttcccata cagggtacat    240
ttttctaatt tgcaagaaag gtgccctaag agctagtggc ttccctgatt gctcccctaa    300
catcatgtgg ttaaatttg gtatctcaga caagtagagg ctgcagatct gcagggtcaa     360
ttggcttcag atttagtcaa tttcttgttt tttaggcagt gaataaatat gtggttcccc    420
tccccccag ttttttttctt aaaatgaagc tcatcaaaca aatgtaccat tctgaggtgt     480
gttctcaagt catatattat aattcatttc actcaaagta tatgattaaa gctcattcaa    540
agccctaaga gttgggaatg aaggaagaat tgtaggatgt tctgctgtgc cacaagactt    600
aatttatacc atttattagt cttaccaagt acattgaaag gaaaaagttg ttgggggcca    660
ggcacgatgg cttacatctg taatcccagc actttgggag gctgagtggg gcggatcact    720
tgaggtcagg aattcgagac cagcctggcc aacatggtga aacccgcct tattaaaaat     780
acaaaaaatt agccagctgc agtgacatga acctataatc ccagctattc aggaggctga    840
ggcaggagga tcgcttgaac ccaggaggtg gaggttgcat tgagctgaga tcatgccatt    900
gcactccagc ctgggcgata gagcgagatc tggctcaaaa aaaaaaaaaa aaaaaaa      958
```

<210> 171
<211> 1302
<212> DNA
<213> Homo sapiens

<400> 171
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ggcacgagat atgtacacat ttatgtgtgg gtgtacaaca tttttctgtg attatatggg     60
tagttttgaa agaatatact tatgagccag agcaagaaat tggaaccaat atgtgtagag    120
gttattgctt ttctctgctt agtgtgtctt ggaaaaaagt tctttacagg taaataattt    180
taaataccaa tacccttagt atggatcagc aaattagggg ctctgagaag tcctttcatt    240
acaagagttg tttagctttg atttattgtt ttctaaactt atttgagctg ggatgctttt    300
tcagagcaga cacattctag tatattcttg ttttatctgc actatagata tgtattgtta    360
cataccttca gcttggcaag gcagactaat aatcttaagg aggttccaag acttcccttg    420
gtttaatgag aacattcaaa aggtgcaggc atagggtaag gtatgtttga ggacttgaat    480
atctattaag aatagacaaa ggattataat gtggtagaag agtttagcat tcatagtctg    540
tatagatcaa actgtcaaaa cttctcaggt cacatgatgg cccttaaacc aggtaatttc    600
tgtgtaacgt aagccatgtt taaaattgct ttttcttga caactattca gaagtatatg     660
tatgataaac attttttgag tgcctagtac ctactagtct tacatattct gtggattact    720
ccacataaaa tctataataa aatccacaga aagctgttaa aatctttcct attttttttt    780
gactcaactt tccatcccct gaaatcactc acaagctgag tttgttaata ggctctcaat    840
atttttatttc ttatattctg gccttgtttt tagtatttct taaggtgatt ttaataataa    900
ttaattgtat atgtttttact gtactagact tagtaaaaca taagaaagac gtataacata    960
gttgaacaac tttaagttgc tctaagaagt ttcctatttg aggctgggtg ccatggctca   1020
cgcttataat cccagcactt tgggagaccg agatgggcgt atcacttgag atcaggagtt   1080
caagaccagc ctggccaacc aaccccatct ctactaaaat acaaacatta gccgggcatg    1140
gtggcacatg cctgtaatcc cagctactca ggaggctgag gaaggagaat tgcttgaaca   1200
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107

```
caaaggtgga ggttgcagtg agccaagatc gcaccactgc actccagcct gggtgacaga   1260
gcgagactcc tgctctcaaa acaaaaacaa acaaaaaaaa aa                       1302
```

<210> 172
<211> 558
<212> DNA
<213> Homo sapiens

<400> 172
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ggcacgagag aaataatctc tcaagctctt cgtacaaagt ttgattaaga gagagtgtct    60
gcaactctct gctttgctcc cagctgggtc tgctgttcta gtgagcgcca gcagttattc   120
tcgttttctg cagtattccc aggctgccaa aaggctctgc tctgtaagct gagaaagact   180
caacagctac aacactggtg ttcacagcag caaggtttat ttcctcacaa gatgatattc   240
ctgggtttgc atacgtttgc tcttttcagt gaaccatgtc ctctaaatgt caccttgctt   300
ccattcagca cggtctgtgt tccgactgtc caggggcttc caggaacagc ccacagattg   360
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ttgtgccctg gatgcagcac ttctttgtac gcgtgctgtg aaataaaatc tcagataatg   480
tgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   540
aaaaaaaaaa aaaaaaaa                                                  558
```

<210> 173
<211> 1679
<212> DNA
<213> Homo sapiens

<400> 173
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ttcagaagtg gaaagctttt tcattctcca gtagaacttt taaaaattgt tacagatacc   120
tagctcttca cagatatcat gtattgtaaa cagtcatgtg tcttaatttt attttctcta   180
tttgagtgca taattatcct aataatccca aagacactga caactcaagg aacagcagta   240
cagtactatt agaagttaag tatgttgttg ttatttcaca tttcatttaa ttgtggataa   300
atgttagaca tctgttgaaa taagctcata tggtggaaac gacaactata ttatgaatta   360
ttttcagaaa tggatctttg aatagcagat caggatttaa ataataaaat tatctatgaa   420
tcacttttat ggtcatacat atatgataca aatccagagt tattggtgca gaaatggcta   480
cccgagagct tggtaaattt gccttggttt cttatgttaa atgtattgtg cttcccttct   540
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gaaaaactaa attaaaaaca ttgcttgata tttcatttaa aattgcacct tgcttaaggt   660
ttactgaata actgaaatgt cagcaattta aaataaattc aattgtgtga taaaatatct   720
cacctataat agaagaaaag gaaaatcata ttatttggca attttgcagc attgtggttg   780
cctaacaggt atatccagca gatgagaaac agtatgaaag gattgtatta acatggtaag   840
ttttgcccta aggaaaacga tcttgcattc tggattcttg cagcaaagtc tcagatactt   900
aatacgtttt cttgktttat catctgktct atgattcggc ttcactttgt gtggktattg   960
aattatgtaa cagagatttg gktttcccaa aatgktatca catttgaaac tatgattgct  ·1020
ttgkgktcag tccttttgga acacgtagct tycagcttaa gggtagagga aatatatacc   1080
taaaatcatc aatacatgaa agaaaaagga tggaaactat gtcctcagtt ttacttctac   1140
caaaacatcc ctgtatgtgt gtgcatgtat gttggcgtgt gtgtgtgtgc atgcatatta   1200
gtaaatgtgt gtttgcatgt gtgtgttggg gagtgtatgt gatctgggtg tttgtttatc   1260
tctgttatta ttcccctttta gctttatttt agtcaactct acattatgat gaatttcaaa   1320
atgaagctgt attaaaataa ttgtaatata acaattcaat ctcacatgtt actgcagata   1380
gttaactttt gctgcaatct attgtacatt tgcaatтttc tgtgttagta aacttagcag   1440
aatctggtta wttattttwg tgtaggctta atgttcactg aaagataagt caattactgy   1500
tagtaaaaaa ttaaggtact ctcactgcag agatttaagc ctgggcctaa tgtgctgtat   1560
tatgaagcct tgtgactgaa aaatatgttt acatatgttg tctattтtтt taataaactt   1620
ttatagctgg tctatttgct cagtaaaaaa aaaaaaaaaa aaaaaaaaaa aaactcgag    1679
```

<210> 174
<211> 1335
<212> DNA
<213> Homo sapiens

<400> 174

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ggcacgagaa atgataatag gcctccccca aaactcagct gcttttgtaa agctaatggg      60
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gagtatcagc cattattctg gaggttataa gatatgcacc ttccccaatt acccctgcaa     180
tcacaccatt attgtagatt ggcccttaga gtatcttttc aggttttttg gcatgtctga     240
cactcatggc tctacttgga cccaccaacc ctgctcctat ggctccaccc agaagccatt     300
cagcctagag gacagctctg accccccctg tgatttcata caatcagcag caagtaactg     360
ttacctcacc atccccaccc cttctgccag actgcctttg aaaaacctct aacctgtgag     420
cacgagatga ttccagaaca aactctgtct cccatgtggc atgaccagcc ttgggtctct     480
taaacttttt ctccactata atgccatggt ctttatgcag caggcaggaa gaattcaggt     540
ggttataatt ccgtatgtgc tttttgaaca tttttctact gggctattgc tctcttcata     600
atgatttttt taacttctct ctataaggaa ctgatttcat ctgaaattga agagacaatc     660
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aacgaagaag gaattctgcc tccagacagc cttccaactc aagtagcaac attacctcct     960
ccctgcggct ctagcctgct ggcctttcct atagacttca gacttgccag ccccacaatc    1020
atgtaagcca attccttaaa ataaattctc tgtcctgttt ttgccccctc tctctttctg    1080
acagcacaca catgccctct tggttctgtt tctttgaaga accccaggaa aacacacaaa    1140
ggaaaaacaa ctcgatagac agaagattct tcaatgacaa caatggaagc catcttcacc    1200
attcaactaa acttgaatgg gatattatca aacttaaaaa aaaattatca actgatcgtg    1260
taatcagttt catcttttaa gacaggaaat gaaataaagt atttacagat gaatgtaaaa    1320
aaaaaaaaaa aaaaa                                                      1335
```

<210> 175
<211> 563
<212> DNA
<213> Homo sapiens

<400> 175
```
ggcacgagga aagatttaat aatcctgcct cttttgaagc ctgaaactta caatttaaag      60
cctgaaatct accataagga acttggtaaa ttgtgtcaga taccatgaaa atgcatcttt     120
tcatagttaa ccacagattg tttatgtaaa ggcaaattgg tggtcaggtt caaggtaaaa     180
tggattattg ggttgattag tagccaaaaa ctaaatgcat gttcaggtca aaatgaattt     240
gtttgtttta gttggtgcca tttcctttat attcagaact acagagtgtg catttattaa     300
taggatgaaa gctcatgctg aggattgaat agggtggatg tatatatttt ataaactcaa     360
gttgcaaaat atgtaaagtc actacttttt aaatagaata taaatgttaa aacagacaaa     420
tctatgttat atattttta atacatgtat cagacttgtt agttgaatgc agattacttt     480
gctttatgga atttcataac ttttaataat aaagcagttg ttattggaaa aaaaaaaaa     540
aaaaaaaaaa aaaaaaaaaa aaa                                             563
```

<210> 176
<211> 2418
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (138)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (171)
<223> n equals a,t,g, or c

<400> 176
```
gctcgtgccg ctgttgaccc cactgagcag tgctaagtgt tggtttagtg gatgttcgtg      60
gaattgctga cccatccaag ggcgtccttt ggagccagtg gagcctgccg gcgcatctra     120
ggggcagaat gctgctanca cttgaatctg ggatctcgcc ttattctcaa ntagcaaggc     180
atctcgacaa gcatggtcta rgtctggtgg ccagcttgcc artacctgag ccggtcgggt     240
```

109

```
catctgcctc tgagggaccg tcctcaccga gctcctgcat cccttgagtg ttgatcagga    300
ggcgtccaca gcattgttct cgcctctgaa tgatgcttct ttctgtgttg gagcctggcg    360
aagttgtgtt ttcaagccct ttactttttt tttccaagtg gggtaggagc ttttggcagt    420
gtttacttta cctagatggc ttatataatc cagtaagaga tgcaaagata aaattgctgc    480
ggttgttaca gaagcatggc ggcctccaga ctgacccatt ggttgccctt tagattttgt    540
aaggatgcgg tgctggggag gtggtgcttc cctacccct agaaatgctg ccttccaact    600
accactctcc cagatgtgac ccttgcgatt atttcctctg aggtttgagg atgaagataa    660
gttggaggga aagagagtaa ctaatagggg atgaaatata gcagaagcta gaagaaagcg    720
gtgaggtgag agagatgcat ctgcacgttt tcttcaacag caccaggtga ttcagcatat    780
tcctaattac cttcactat tcgtgtatat aagatcgttt acttgcataa tatatcatca    840
atttgacata ttcttaaaac tagagggtgt gagaagcaca gcaataggaa gtctctccac    900
aaactagggg aacacaaatg gggtcattca cgtgcctgga ctgtcactat gtggctgtca    960
cgtgaagtgc tggtgttgat ttccatttca gccagtgggt agctgataag ccagtgccag   1020
catccagcat gagcagatgt cggggagact gggaagtctc cagcgttact gctctccttc   1080
ccttcatgat aagccagtgc cagcatccag cgtgagcaga cgtcggggag actgggaagt   1140
ctccgatgtt actgcctgcc ttcctttcgt gtgaggggct gcacttgctt ttcttgtgat   1200
ctgttagtgg acgaggtctt ccaaggaagt gctttgcaca ctttctttgc tcctttttac   1260
agtctttgtc tttgcagcaa gcaaatgaaa ttaagccact ttgggataat gaacattcag   1320
tataattcta ctttgtctca ttttggatct cactgttgtc tttataaaaa tggcacattt   1380
tacaaagtag tttattctta ttatactttc tgctggagag tgccttgaaa taaaatgtga   1440
gagtattctg gtactctgtg ttccagatgc atgaaattgg gtgaggaata accctagtc   1500
tggaatcttt gtgaagcata gggttattgc aaggcaaatg ggaactaaca catcttgcca   1560
tttgaatcag ggtctccagt ttctagaaaa ggcagacact ggttgggacc aaagtctcca   1620
tggcacatga ctgaagactg gtggtcgtgt gtgtgcggag tccacrgaag cctcggggag   1680
gtggagctgc tccttccatt ccgtcaggac gtgatctgaa aacatgtaga gaagatgagt   1740
tgaggacagc ttttctaagg caatgtgatg tctttgcttt cttatttctc tttctctgcg   1800
ttgttagttt tgaagagtgg aggagctagg ggctccagaa agaatcttac acatgtgttg   1860
aagacattga tgtcataggg agcgggggagc tgcattccct tctgggctgt tactgctaaa   1920
tctcagtatg aacagaccag gcggaaagct tggtggccaa gcagtctgtg tgcttccccg   1980
ctgatggaga acgttgcgtt gttcacaata gggcctcatg ggtgtagccg catggcagac   2040
ccatggctgg cgcagctgcc tgttgccgtc tgtcttcagt aactgctgct ctgttaactg   2100
ttctattctg atactacgcg tgttgttttt tacaacaggt atgttttgt ttcagaaata   2160
tgtattgctt ttctcatatt ttttgcaaat tgtattgtca acatgggtca tttaaagtcc   2220
tgtatgaacc ataacctgct gtggtacctt tgtacatgtt tgattctgta ttctttattc   2280
cagtgtggca tatgtgcccc tctgtatctt ttgagaagtg cggaataggt tgcttctacc   2340
acctgttctt aatgtaacag taaaagtttt cacatttttc tcagaaaaaa aaaaaaaaaa   2400
aaaaaaaaaa aactcgag                                                 2418
```

<210> 177
<211> 1308
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1291)
<223> n equals a,t,g, or c

<400> 177
```
cccacgcgtc cgcccacgcg tccgcactcg cgctcggctc accatgtgtc actctcgcag     60
ctgccacccg accatgacca tcctgcaggc cccgaccccg gccccctcca ccatcccggg    120
accccggcgg ggctccggtc ctgagatctt caccttcgac cctctcccgg agcccgcagc    180
ggccctgcc gggcgcccca gcgcctctcg cgggcaccga aagcgcagcg cagggttctc    240
taccctcgag tggtccggcg ccagctgcca gtcgaggaac cgaacccagc caaaaggctt    300
ctctttctgc tgctcaccat cgtcttctgc cagatcctga tggctgaaga gggtgtgccg    360
gcgcccctgc ctccagagga cgcccctaac gccgcatccc tggcgcccac ccctgtgtcc    420
cccgtcctcg agcccttaa tctgacttcg gagccctcgg actacgctct ggacctcagc    480
actttcctcc agcaacaccc ggccgccttc taactgtgac tccccgcact ccccaaaaag    540
aatccgaaaa accacaaaga aacaccaggc gtacctggtg cgcgagagcg tatccccaac    600
tgggacttcc gaggcaactt gaactcagaa cactacagcg gagacgccac ccggtgcttg    660
aggcgggacc gaggcgcaca gagaccgagg cgcatagaga ccgaggcaca gcccagctgg    720
```
```
                                  110
```

```
ggctaggccc ggtgggaagg agagcgtcgt taatttattt cttattgctc ctaattaata      780
tttatatgta tttatgtacg tcctcctagg tgatggagat gtgtacgtaa tatttatttt      840
aacttatgca agggtgtgag atgttccccc tgctgtaaat gcaggtctct tggtatttat      900
tgagctttgt gggactggtg gaagcaggac acctggaact gcggcaaagt aggagaagaa      960
atggggagga ctcgggtggg ggaggacgtc ccggctggga tgaagtctgg tggtgggtcg     1020
taagtttagg aggtgactgc atcctccagc atctcaactc cgtctgtcta ctgtgtgaga     1080
cttcggcgga ccattaggaa tgagatccgt gagatccttc catcttcttg aagtcgcctt     1140
tagggtggct gcgaggtaga gggttggggg ttggtgggct gtcacggagc gactgtcgag     1200
atcgcctagt atgttctgtg aacacaaata aaattgattt actgtctgca aaaaaaaaa      1260
aaaaaaaaaa aaacycggg ggggggccgg nacccaaatc cccccaaa                    1308
```

<210> 178
<211> 1009
<212> DNA
<213> Homo sapiens

<400> 178
```
ggcacgagat tttattcccc atacttatag tgcttgacat ctggtaggca ctcaatttga       60
ataaataggt gaggggatat acaaactaaa actatcactt ctctcctcca cctgtcattt      120
cagttttttct tctcgattaa tggctttatt gttacatttg actggtttaa aatgttgggg      180
tcatctctgg cttctttgta ttactgtgca cactcaggta gagcctgtat gttcatttcc      240
ctttgacatg ttcttctagt ctattcctcc tccgacttct ctaattgagt ctcctttgtc      300
agactactgt gataacttct taatgggggtt cactggcccc cacctcacct tctgtttttc      360
aaatctcacc agttatagga cacttctgaa catgtcacac tcagaattgt tgatgtcttt      420
tgagttcaac ctatgctaaa gtgcactttt tagcatagaa ttaacagcaa ttgatatttg      480
gcttcatcct gcttttctga ctggattgtc taccataacc ttttatctcc tttttgcttt      540
agccagtccg gactgctact tttcctgaat atggctggaa tgtcccactg tatctgtttc      600
accgcatcta tgagtctaag tcctatctta tctattgcac aaatatatca tgcctactat      660
agaccaggta ttgcccttga cactcaggct aaaaaggtaa atgacagggc cgggcgcagt      720
ggctcacgcc tgtaatccag cactttggga gagcaaggtg ggcggatcac gaggtcagga      780
attcaggacc agcctggcca acgtggtgaa gccccatctc tactaaagga tacagaaatt      840
ggcctggcgt ggtggtgggc acctgtaatc ccagctactc ggggggctga ggcgggagag      900
tggcttgagg ccggaagacg gaggttgcag tggggcgaga ttgcaccact gcactccaac      960
ctgggcaaca agagcaaaac tctgtctcaa aaaaaaaaa aaaaaaaaa                   1009
```

<210> 179
<211> 561
<212> DNA
<213> Homo sapiens

<400> 179
```
cgaagctcga aattaaccct cactaaaagg gaacaaaagc tggagctcca ccgcggtggc       60
ggccgctcta gaactagtgg atcccccggg ctgcaggaat tcggcacgag acctcctgag      120
tttccatgct cctttctgta ccaggtttaa atgtagtctt ctggagaagt atttttgaca      180
ttgagctctg ggacaggaca ccttgggttt gtggactgca gcccactatg atgttattac      240
ttctctggcc aggcctccag tggaagtgca caggcactcc caatgttgtt aatgctctgt      300
cttccatttg ttctggaatc ctacgtgttg gtctgtggtt ccatgcatta gctgtttgta      360
aataatgcat ttgcatactg aaaaaggaat gccacctgcc acagttgatg gtgaggaagc      420
tccttgacgt ggtgcaattt tgatgagatg tctctggggg acacgaggat gccctaatga      480
tgctgacttg tcatggttgc agcatttgaa cttttggtgt taaaaaaaaa aaaaaaaaaa      540
aaaaaaaaaa aaaaaaaaaa a                                                561
```

<210> 180
<211> 1718
<212> DNA
<213> Homo sapiens

<400> 180
```
ttttttttttt ttttttttttt ttttttttttt ttttgccat tatagttgtt aacattttta       60
ttgcatattt acaatgtgtg gaacattata aggatttaca gtagaagcca aatttcccag      120
cccttaaaat tttaatagga aaatcgaat aaaccataca tatttttgaa aatgagcatt      180
```

111

```
agaaacacac agatgattat aattctatag actaatacag gtgaatgctg tatggaatag     240
aacagctggg agaggtaaaa gagtggataa gagagtcatc agagtgtgaa aaaactacag     300
ctggggggta ttgaataaag agacaatatt gaaaatattt ttaaacggta aaatgtcccg     360
gtaaaagcat agcttttccc ccttatgcaa aacttgtgag gtaagaattt tttccccacc     420
ccgttttctg ctcttctggc caaccatttg gggggacttc cctgtcccag gtgactctct     480
ctcacatagc tgtaccttgg ggcttactag caatacatgc tttccactac cccctcaacc     540
tcatcacaga aataaccttt tctgttcaat gatcagtctt actttaccta ctgaaaacgg     600
gtggtgaaag ttagtaacat aaacaaacca gtgctgtttc ttctagctaa catatcacca     660
tggttgggct ttaacctttc aaggagtgaa atattgctaa agtttcaggc ataggaaccc     720
cttgaggagc tgtctggggc agacaggtct ttgctttcct cagatagttc caattgtcat     780
ccttgaccat gaacaatgcc attgttattc caaactcact tcttctaata cttcaatatg     840
gatcataaaa atagtttaca ccttttatgca catcaaaata caaaatacag ggcacaataa     900
aactgaactg gaaaaaggta tggcagtttc ttttaaaact accctgtgac ccagcaattc     960
taatccaagg aatttactgc aaagaaatga aaacctatgt tcacaaagac ttacgtaaga    1020
atggtcatag cagctttatt tataatggcc aatcctggaa acagcccagg tatctatcaa    1080
taataggaaa ttaagaaaac aaactgtaat attgtcatac agtggaatac tactcagcaa    1140
taaaaaagaa cagcaataaa aaaatgaagc cttgtagaaa agcgtacatg ttgcgtgact    1200
ctatttatat aaagtttttag aacagaaaaa tcttatggta gaaaaaggaa cagtggttgc    1260
ctttgagggt caagtaggga caggaattga ctggaagggg cagtgtggaa actttctagg    1320
gtggtgataa cgtttcctat ttccatagca ctatatgcat ttgccaaacc tcagtgaaca    1380
cattttctat gcacttcatt gcatgctaat tttatgtaaa aaagccaaca atgaactcta    1440
gttaatgata tgcaatttaa aatgcatcaa ataataatat gaaatgatga atggatatgt    1500
gacaaagcaa gcataggtaa tgctaattag catctaggta gtgagtacac tataaaatta    1560
ttaacttttt aatgtatttg ataattttca taacaagatg ttgggtaaaa atacagggtg    1620
caatgtttac caaatagttt tgctgagaat ttcattactg attttatgac agtaagatca    1680
tcaaattctt ctaagtgtcc attgagacgg acgcgtgg                            1718
```

<210> 181
<211> 422
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (407)
<223> n equals a,t,g, or c

<400> 181
```
acgcgtccgg taagggatga gaaagtacct gatgggtaca gtgtacactt ttctggtgtt      60
ggttgcagga aaagcctgga cttcaccact tcgcaatata tccgtgtaac aaaactgcac     120
ttgtacgcct tatatttata caaatttaat ttttaaaag ggaagagaga atcatattaa     180
tttctcacca cttttttaagt aagcaaacag cagtatttcc cagaggcaag aggttcagca     240
agaagtcagg aaatgttttt gtagataagc atctatcatt ctgatgggcc atgactagtg     300
tgttcacttg taattccttt gcctttaaaa aaagagaatg atatcaaaaa ataagtgcct     360
tatactgtga aacgataaaa ggacttcctg attctaaaaa aaaaaanaaa aaaaaaaaa     420
aa                                                                    422
```

<210> 182
<211> 2234
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2157)
<223> n equals a,t,g, or c

<400> 182
```
cccacgcgtc cggctaaagt ggtattgatt ttaaacttga ctcaccaact tcacaggggt      60
taatacagat gtgaaaaatc ttgagttata agcttcctgc atgcatgaga cttgttttta     120
ttttgctgct ctagtgttat tggtttattt acgcaaggag aaagaaggca gggaatttat     180
```

112

```
ggtcaggaga ttcctggtca ggaggttcat agtcagaaga tctagactgg gtcacaagaa       240
atgacagaat ttaagcattt gagccaggga ataagaatgt gtgtgctctg cctgtgtttt       300
ccacattcat tttactcagc attgcactgt catcttgctt aagaacaatt cagtaggtca       360
gaaacattgg attccaaagc tgttaatggt ttattttcca tttcttgcct tcgcaatatc       420
tgaaataaag ttatatccca gataactgat gggaaaacag ggttcaaagc tataggatat       480
atgactcatt taacataaaa ttattcaaat taatgaatta gcaaatcctc ttgtgcttat       540
aataagcaaa tataagtttt atcttgtcta ttataaaaga aatgtctaaa cattaagtgc       600
aaaaccaaac taggcagcag gagaaggaaa ttagttatgt tgtttttata ataaggattg       660
taaaaccaat atcttagtga aattctcaga aagcttgatt taaaaattta tcaaaattcg       720
ggagtttttt tgtttcattt ggtctatttg tcagtggttt gaggtcttag ttctgcagcg       780
acatcttatg gagttggtta gtttgcacaa ccatttaata atgtctgcca gaactgatca       840
ttgtctaaca gatttgatgc aaataggatc cctgcctgcg ctttgaatgt ggaagtaatt       900
aaacggatgc tatgaggact tttatttttt tctctgttgg tgcttatcta aaatttcctt       960
atcatggcaa ctgtataatt tttaagacac tccaaaatat gtactgaggt ctgaaattct      1020
cactacatat tccaagttag gataggaggg gagaaggaag ctgttgaata gtgaaataag      1080
acagcagtaa aagatcacag tacagctggt gtttgttggc aagagtttcc acttaaaaat      1140
ttgcagcagt gcaagtacct caattattat tggcgctttt cactgttcgt gatcaccagg      1200
agtgaaaaaa aaagaaaaga aagaaaaga aaattgaatt ctttgaagct cagagaagta      1260
aactgaaaaa tttttgagta ccgaaattta cccatttctt cttctgattg tgttcttttg      1320
aacagaacac attgcattaa actctagaaa gaaaaaaagt gactgttttc atatttttat      1380
gattggagtc acattcttaa gatctataat gtagattaca gcaccatttt gttatctgct      1440
agaagaaata tagctaatca tctctaaatt agtaatgtta cattttattt tgcttcctat      1500
ttactagtgt ggcacatttt aatgacagaa aatttccttg aaggcaagag ctttacacac      1560
agtaggattt cactcagttt ttgcatatat tgaccattgc agaatacaaa caactgttaa      1620
gtaatttctc ccaaagacag gccataataa agaggaaaaa tataaactat atgacactaa      1680
aaatcctgtt aatcttgatc aatcagtgaa tgaaacacta attgtgccaa acaacacatt      1740
ctacctgaac aaaaggaggt aattgcagta tgtttctatg aatacatagc agctgttcta      1800
tgccattatt atcactggtg agtaaagatc atggtgaatc attgtctaat atcttgtgat      1860
cttgctcaca tataaaaatt gccaggggac ttcattaatt atgattgcat cttaagggct      1920
ctggacattt tcatgagtgc cacaggacac ctagaaaata attgcatctt ttgagaacca      1980
tgtgccagtg acaaggtaaa gctcaggttg tatattccag agattctctg gcaaatgagc      2040
attgcctgcc ttaatattct aagcccatca gttagaaaag gctgaccta tgacttaaaa      2100
ttgcatgctg catgattaga aagatagata acaatatatt ttaaagaatt atttgtncct      2160
cacacatgcc caacaagatt gaatgatttt aattgaattg aatattggta aatttgctag      2220
aaaaaaaaaa aaaa                                                         2234
```

<210> 183
<211> 307
<212> DNA
<213> Homo sapiens

<400> 183
```
cccacgcgtc cgagatgagt aggtgtctgg tacagaagtc ttagtggaga gttggtactg        60
gaatcctggt ctaaggtatt aggtttaat ttgctagaca aagagaactc aagcagtgct       120
gtctaggagt gttatgtaag ctagattgga ctttagagtc cggagaccat gcgggaagat       180
actgtgtgat aagggcctga aacatgttgg ttacagtgag actagaaatg ggataaatcc       240
agagctgttt caccagtaga cttgcctgaa tatcctgtct gactgagtat ggatcaaaaa       300
aaaaaaa                                                                 307
```

<210> 184
<211> 1758
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1720)
<223> n equals a,t,g, or c

<400> 184
```
tgtcccggcc tgaggtgtcg gccggatccc tccttctccc ggcgcctcaa gcggaagacc        60
```

```
attcctcaag aattttgtat ccaaggccca aaagtttgtt acccaagatg atgaatgctg    120
acatggatga tctctctgca agagtagatg cagttaagga agaaaatctg aagctaaaat    180
cagaaaacca agttcttgga caatatatag aaaatctcat gtcagcttct agtgtttttc    240
aaacaactga cacaaaaagc aaaagaaagt aagggattga cacccttctg ttttatggaa    300
ttgctgctga tcattttttc tttaaaactt ggatagattc caaaagttac agtacctttg    360
tggcttcatt gaatatttat gaagataatg tcagatgtag acaaaaataa cacaataaca    420
ggagacttcc ataagttgt gtattatgtt agtctatgaa aacgtgcaaa tgtattgtag    480
agactttatg attagaattg catatattta tgaaacttaa agatgaatgt tttattgaat    540
ttgtaggttt agcactgtct tttattatag gattagtaag atatacaaga aaataaccac    600
cgtgttgtga aaaagtgacc aaaatcatgt actaaatgca cagctttatg taccctgtcc    660
accatcttgt gcctcttctc catttgcctc ttccttccta tttcccttcc gctaaggaaa    720
aaaattggtg tcacatttgt aaaagtaatt ttaatagtta atcatctctg agagtaacct    780
gtattttaat tgttgaaact taaccaaaat aagatactgt ctcagctagg gcttgtcatt    840
tgtgtattta gtgttaagat aggaatgcta gtgtctcttt aattaattgg aaatagatgg    900
aggctaaaaa tgaaggtttt tctttgaaac tgaattaact tgggaatatt tgttgttaaa    960
aacttctttt tgcccaaaat aactcatttt gtattatctg aaaatatata atttctggtc   1020
atgtgtatgt taaaatagaa aattttgagg aaaaatggaa ataggtgga aaagtactcg   1080
gtaaacagta gtaaccaaat attttcactc cagatttgtg ttttctctgg cacagagtag   1140
atcttttggg aaatatatat gaaagtggat taagtttgac tacccttatg ttagccacat   1200
ctggatgaga acagttacaa agagtttggt ctctaagttg atttgtaccc agtgggtcaa   1260
cttctgcaaa attccgtaat ggtgtattag tattagaata gtgaataaaa tgggaaagtt   1320
atacatgtat acttattatc ttgctcagta ttttatctca cttgttctag aattttctgt   1380
aaaccctgct actgggtttg aagagttta gtcatccttt aacaatttt aaaaatttag   1440
cttctagatt ccatttggta aggaaatcaa tattggaagt attgctaaaa tcttataata   1500
tgaaaagaga tccactaatg tagcttaagg ttattagatt tgggctttta atcatggaat   1560
aatcttatgt attggtgtaa gagttgatga atgactttag ctgtgtgaat atataatagt   1620
caaactgcaa acattttgca tcccttttgt gacctaattt acagacattt aaattgtgtt   1680
gcagttctgc tttgccgttt aataaaaagc tatttcagan aaaaaaaaaa aaaaaaaaaa   1740
aawaaaaggg cggccgct                                                 1758
```

<210> 185
<211> 1056
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (34)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (46)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (131)
<223> n equals a,t,g, or c

<220>

114

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<221> SITE
<222> (1015)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1035)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1052)
<223> n equals a,t,g, or c

<400> 185
cctcgtttta gtnanccgtc aagatcgcct gaanacgcca tccacncttg ttttgacctc      60
catagaagac accgggaccg atccagcctc cggactctag cctaggcttt tgcaaaaagc     120
tatttaggtg ncactataga aggtacgcct gcaggtaccg gtccggaatt cccgggcaaa     180
ttacgttgat tattattttt atttttgta tagcttacca cttacgtgta tatctctaaa     240
aaataccttt gcatgcttga actttacata aatgtcttac tatatgcatt tttccacaac     300
ttcctatatt cattcagtag tatgtttttc agtttcattc atgatgttgc actgaagatt     360
atatattttc actcccgtaa atttgattat ccaaaagagt tcatgtaaga ttggaatgct     420
cacttctttg aatgtttgac agaactcagt taaattacct gggattggtg tcttccttat     480
ggaaatattt gaattatcaa tctcacaccc tcaatgattt taggactagt attattttcg     540
gtttcttgtt gagttcattt tgttattgca tttaattttc taagaatttg tctatattca     600
ctgaatttta aaaaatcatt gcttgcattt tataatattc tctacctttg aaaatataaa     660
tgctgcattt gtctttattg ctcctttcta ttcttcatat tattaatttt taaattaata     720
ttttaattaa ttgaagcctt ctytatataa cttagctgaa attcttgtac ctttgcttcc     780
tattcactaa ttccactata atgtttattg tttgcttctt tcttgtgtaa aattttgtga     840
atcttgtttt ttttataat ttcctaattt ggttctaaac tattaaattt aagtctttcc     900
tattttctaa taaaatttt ttgaaagcgr aaaaaaaaaa aaaaaaaaaa aaaaaaaagg     960
gcggccgctc tagaggatcc ctcgaggggc ccaagcttac gcgtgcatgc gacgncatag    1020
ctctctccct atagngagtc gcattataag cnagct                             1056

<210> 186
<211> 470
<212> DNA
<213> Homo sapiens

<400> 186
ccggaattcc cgggtcgacc cacgcgtccg gttttgttac ttttattat ggaaaatttt      60
aacatacaaa tgagaggaga gtgtaatgac ttacacatac aatatatgtt catttcatgg     120
ttcatcttgt ttcgtctata tccccttttcc tcccccttct tctcccagaa tgttttgaag     180
caaatctcag acatcttatc accttattat ttcatccaaa agtatttag tatccctgaa     240
agatacagct cttcaaaaaa gaaaactaca ataccattat cacacctgaa aagttaattc     300
atcagctatc cagcattcaa gttaccttgg ttgtcttata aacattttgt tttgttttac     360
agtatgttta tttggatgag atttaagaca aagacaatac actacaaata gatgtcaaaa     420
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa gggcggccgc tttagaggat                470

<210> 187
<211> 932
<212> DNA
<213> Homo sapiens

<400> 187
ttgcaaaaag ctatttaagg tgccactata gaagggtacg cctgcgaggt accgggtccg      60
gwaattcccg ggtcgaccca cgcgtccgag agacatccat atttccagtg tctctctcat     120
gtttaagctt ttttcggaat caagcccaca ttcttcagca cggcattgaa gactcaggag     180
ccctcccagt ctggccccat gcacagatgg aaggctttct ttcctggtcc ttatccttct     240
ctgcacaata ctccagtcac accacaccat ggactgctct ctgaccctca tggcattcca     300
gtggcgttat gctctcatac agccttcctc atttgcccac cttgcttgtc tctgactcat     360
```

```
attctattcc aaggctaagc tcaaatgtca tcatatctct caaactgtcc ctcacactcc    420
cgcccccaca tgatttagtt gtattctgcc ttttgttcca caggtctttg tacatcatgg    480
tattatggtg tttaagtctg tacatatgta tttgtattgc catccccaac ccaggctcca    540
agccttctga aggtagaaaa ctgtatcaca taaatgaaga atgaatgaat gaatgaatga    600
gtaaatattt agcctatctg tctgaactgc ctgctctgtc ttagccattg gaaacatgct    660
tagaactaaa tcattttcta agaaacaata gtcttcctta gtattaattt tatattattt    720
ttctctcttc tctccaagcc cttatcactt ggattcttgc tattttactt ttgctttaag    780
atatccctgt tgtcttatta actackttga gtcctacaca gatttatgta agtgagaaat    840
atacaatatc ctatgtacct cacctgagct aaataaaatc attttccatc aaaaaaaaaa    900
aaaaaaaaaa aaaaaaaaaa aagggcggcc gc                                   932
```

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<210> 188
<211> 1953
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (500)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (742)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (946)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1028)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1038)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1229)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1251)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1264)
<223> n equals a,t,g, or c

<400> 188
ggcaccggcg gcgtgagggc tccgggtcgc tggcggcgtg gacayctgag tcccggggta     60
ggggtctccc gcgaggagtg agctgttgcc gcakaatggg ctgctggctc ctgccctgct    120
tcctgtgatc gagccggccc tgaggactct gtggagatgc ctgtaaccca ccggaaatca    180
gacgcatctg acatgaactc agacacgtcc cccagctgca ggctccgagc cttcagcaga    240
```

116

```
ggcggcagct ggagagtcga agcagcagct ctcgctccag aagcttcact ttggatgatg    300
agagcctgaa gtacctcacc catgaggaaa aggatgtgct cctgtttttt gaagagacga    360
ttgactccct agacgaggac tttgaggagc cagtgctgtg cgatggagga gtgtgctgcc    420
tctgctcccc gtctctggag gagagcacct ccagtccctc cgagcctgaa gatgtcatcg    480
acttagtgca gccagcaccn tggcgccggg gaarccgagg gccttccaga ggggacccag    540
gcagmagggc ctgcacctgc tgggaaggag cacaggaaac aagatgctga gactcctcca    600
cctccagacc ccccggctcc cgagaccctt cttgcgccac caccctgcc  tagcacccc     660
gatccccca  ggagggactg cgcgcccct  ccccgccggt ggagcacccc agactcctgc    720
gctctgttcc cacgcccctc gntatggcgc agaagatttc cgagaggatg gcggggaacg    780
aagccctctc gcccacctcc ccgttcaggg agggccggcc cggggagtgg aggacacctg    840
ccgcccgggg gccccgcagt ggagaccctg gcccggggcc cagccacccg gcgcagccca    900
aggcaccccg cttccccagc aacatcatcg tcaccaacgg cgcggnccgg gagccccgca    960
ggaccctgtc cagggcggcc gtcagcgtgc aggagcgcag ggcgcaggtg ttggccacca   1020
tccacggnca cgccggcncc ttccccgccg cgggggacgc cggcgagggg gccccagggg   1080
gcggctcctc cccggagcgg gtggcgcgtg gccggggcct gccgggcccc gctgagagtc   1140
tccgggcagg gggtcaggct ccgcggggcc cggcgctggc caacggcttc ccaagtgcgc   1200
acgaggccct gaagagcgca cccagytcnt tcgcgcccgc tgggaagtcc ntctgcttcc   1260
gccntggccc ggccctgccc agcackcggg cccgtcagag cttccccggg ccccggcagc   1320
ccaacggcgc ccaggactgg cgccgcgcag actccctgcc ccggccccag ggcatcaccg   1380
tgcagttcgc gggccgcggc tcctcggagg aggcgcgcag ggaggcctgc ggaagctggg   1440
gctgctcagg gagagttcgt gagggccgcg cgggctccag tccaccctgt ttctccccac   1500
cctgaagaga gggtgaaaga gtcgctgcac ccaggagctg tttggtctaa aatggaagtg   1560
acagcgggag cccctgccct ctgtggcaca tcggagtcta gaggtgcctg gctggggcct   1620
cctggctgag cacgcaccgc aagctccagc caccggcaca gagaactctt ccctaaagga   1680
atctggccga gggcttgtct cccttttccc aagaactgag agagagagaa taacctgtta   1740
gacccatagg tttccgtgat gtgtaaatgc catctttgg  gggttgggag gagtaggact   1800
ggtctgatta tcattcttga gtctcatcta ccctcttctc gaagtacatg acatgaaagt   1860
tcagatccct tccactcagg attctcgccg ccttttctaa gaaataata  aaaaaaaatg   1920
cttgtttcaa aaaaaaaaa  aaaaaaactc gag                                1953
```

<210> 189
<211> 1008
<212> DNA
<213> Homo sapiens

<400> 189
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ggcacgagtg tcggtcccct ccctgagcca gcatctccat ccaccacccc gtgccagctc     60
ccgtgccagc cttcattcct cccagtgtcc aagcccctcc aggagggtcc tggggtgggc    120
cagatgcctg cccacctctg tctcctgcct ctgctcctct gcccttctta tagccagaac    180
ttgtatcttc tcagcaacct tcactttgtc cttgtccctt taccattccc catcaaagag    240
tagtctgcta tatcaatttg tgtagatatg tctgtctttt tgggtcctca gagaaaatgc    300
ccattttctc ggagaattct ctgcactcct ctctgcttca cattcaactt ccctgttctc    360
atctttggta ggattctgcc agttgctttt gcatcttctg ttcctgggta atggtgggtc    420
ttaatggagg ctgggtggac cactgcccgt ccactcttca acaggaggaa cagcatgcca    480
ccacagtaac acacattaga gaaaggacag aggtctgctc cttcctgcca cctttctcct    540
ggccccttag cattccccca gtccctccct cttcaccttg ctccgtctat gtcttcccag    600
ctcagccttt tccccactct taaatactgt actacttcac tgtaagaacg aaagaatagt    660
taggatacca atgagtaaaa gggttcctgt tcactctgac tctgtgcaaa ttgtattaca    720
gtagaccgct gacgttccca agtgacagat ccagggcctt tcaaacatcc ccaaagtcat    780
ggccatactc accattagcc agtttctaac atctgtttca gggtatccag ctgtagatgt    840
tcttatcccc catacttgtg agttcttggg gttgctcaca aatactaggg gtttttgttg    900
tatttttaac aaatatatcc taatgtcata tttattctct tttgtaactg ctgtctttac    960
aataaagaaa tcatctgcct ttctatctta aaaaaaaaa  aaaaaaa                 1008
```

<210> 190
<211> 421
<212> DNA
<213> Homo sapiens

<400> 190
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ggcacgagca ccctgcagct ggagctggag accctgctgt cttctgccag ccggcgcctg     60
```

```
cgtgtgcttg aggccgaaac ccagatcctc accgactggc aggataagaa aggtgacaga    120
cgattcctga agctgggtcg agaccatgaa cttggagctc cccccaaaca tgggaagccc    180
aagaagcaga aactggaagg gaaggcagga catgggccgg gccctggccc aggacggccc    240
aaatccaaaa accttcagcc caagatccag gaatatgaat tcactgatga ccctatcgac    300
gtgccacgga tccccaaaaa tgatgccccc aacaggttct gggctagaga acatagaagg    360
gggcctcaaa gttctggtgg tggaggcact ggtggggcaa gggcgcccac tcaggatttg    420
g                                                                    421

<210> 191
<211> 1086
<212> DNA
<213> Homo sapiens

<400> 191
ggcacgaggt gggatttgct ttcatgtcct gtttcaaaaa ccaagtgtct cttgacagcc     60
cactggttct tcctgtcctc ttgctctagt ctgtatcaga aagcagaatg actgtacttt    120
tgttttacaa acaaccacct gataggacgg acactccacg agataaggaa aggcacgtgc    180
ccttgagctt gaatggaagc agcctctgga gggggcagcc actgcccttc gagggagagc    240
agctcttcag cagtggccag agtgccacgt gactctgcag atgacccctg ggagccgggt    300
gatgggcacc tgctgggggct tttgttttttt ctttttcact ggctggcttg atcctcagtg    360
gcaaaaggac ccctgagccc cttctccgag ccctggagca ctcctcggga caccgagtgg    420
cctcagggct gggttcagag ctcctcccgc aggggagcct cagaagtgga ggcagctgct    480
gatgggtgag tttacaactt cttatcctgc ctaaggcgag taggcgtttt tattccgttt    540
ccagtccttg agctcagcag atcaaaataa cagtgaccct gcaaccccac agagcccgcg    600
acacgctcgc tttcttcccc gccctgcccc tttagtcccc gctctggaag gccaggcagt    660
ttaggtgtaa ataggtatct tttatggttt ccaaatgaat tatttgtgtg agagtaatta    720
aatctgtaag aaaacctgtt gagattcttc actatgaatt atgacttcta caacatgtat    780
tttagcaaaa acacgatgct ggcctccact ggatagctca gtatgctgat tgccagtgat    840
agttctgtac gcgttaccaa cagcgtcttt attaaccctc ttccacatcc agtggaaatc    900
attgctaggc ggtatttgtt ggttggctgt tagctttgct ttatgatttc atgtttcttt    960
taaaggttgt tttgcatgtt gaatattaaa ttttttttttt ctgtgtcttc ctctaaaaaa   1020
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1080
aaaaaa                                                               1086

<210> 192
<211> 1038
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (142)
<223> n equals a,t,g, or c

<400> 192
ccacgcgtcc gcttactcaa ttttctacaa gttcatccat aaaatctgcc tttatttaca     60
taaaattata taaaatattt gaattaaaag agatcataaa taattctatt ttttcccagt    120
tcatgtggca ttttagacat antcaaaatt tgtagcgtta tttttttttc ttttccaaat    180
ctttaaaaag catctataac ccactgaata agatgggtta gaagatgaag ctgctgagaa    240
gtgctgcaaa gctgatggta ttgatatcaa cacaaacatc atatgctttt ggggaacagt    300
gcactcattt gaccttattc ctaataaatt caaacagtgg gaaaattcct ctaacttatt    360
tttaaaattc tcttttaatc tattacttcc ctattggtga atgatacaaa ttagtttctt    420
gacctctgtt cagatactgg gttacataca attttttggcc atttaagtat actgtaaatc    480
cctccagaaa actttcttat attgtcttgt gcttcacagc tagttttcag gcatatgtac    540
tgcttacaaa ttagtttggt atttaaaaag gagttgtggc ttgagttaca aagatttaaa    600
gttaaagcaa tgctcttaat aatttctatt ttctcactga atcaattcac actagacacc    660
cctttaactt ccatatacat gatcactcac cttctgtcca aaaatctatt ttaggaaaga    720
gcagaagtac aagaggacct tgtaaacaat actactaata ttagtaggaa tacggcaagg    780
tttaagagtg acaactttag cttcactact ttcaagctgc ttactagctg ggacaagttg    840
tataaattct ccgagcccat tttcctcatt taaaaaaggg gccatagaca ttttttccaaa    900
gacatacaaa tggccaacaa gcacatgaaa agatgctcaa tatagttaac cattagggaa    960
```

```
atataaataa aaaacacaat ttcaaccaca atagtactac atacacatta gaataattat    1020
gttaaaaaaa aaaaaaaa                                                   1038

<210> 193
<211> 765
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (757)
<223> n equals a,t,g, or c

<400> 193
caggacctgg aacgcgcggg cctgcggcag gggagttaga gcagcagctg cacgcccagg     60
ctgcggagca cctggaggca caggcccaga actcccrgct gtggcgggcg cacgaggcgc    120
tgcgaacgca gctggagggg gcgcaggagc agatccgcag gctggagagc gaagsacgag    180
gccgccagga gcaaacccaa cgagacgtgg tcgccgtctc caggaacatg cagaaagaga    240
aagtcagcct gctacggcaa .ctggagctgc tcagggagct gaatacacgg ctgcgggatg    300
acagggacgc ctgcctgggc ccacctgctg ctgctgctgt tgctgggctc ggcccccag     360
acgcggctct ggccaccttc ccagtgcccg gtgaccagcc ccgagtgact cacggaccat    420
gagctagaag ctgcccttgc aggaggcttg tcatgggtcg ggggtgccca ctcaggatgc    480
aggctctccc caggggggccc caggctcgcc tgactgaaga catgaaggac ctagcctagg    540
agtggtcagg gtcccgggag tggccagggt cccgtgtgtg ccctctgcca gtcttcgctc    600
tgtccccgtt caatcaaccc catctcagtt cagcagaaaa ccccctcgtc aaataaaacc    660
cactgactgc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaattnaag ggggg                    765

<210> 194
<211> 668
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (35)
<223> n equals a,t,g, or c

<400> 194
ccgggggaat nanagggana acntccccctt actanaggga acaaaagctg gagctccacc     60
gcggtggcgg ccgctctaga actagtggat ccccgggct gcagrcgggg ctgtgctggc     120
```

119

```
tgcccgcagt ggcccactgg ccatggtggg ctcagcaatg atggggggca tcctgttggc    180
cctcattgag ggcgttggca tcctcctcac tcgctacaca gcccagcagt tccgaaatgc    240
gcccccattc ctggaggacc ccagccagct gcccctaag gatggcaccc cggcccagg      300
ctaccccagc tatcagcagt accactgagg aagccactgc caccatggga gctacttctc    360
ggttccctcc ccgatggtct acctcgaagg gagggctggc tcccagttag ccctgggacc    420
ctccagagag ggtttctact ctgctcccta gtcccaggGt gggggtgggg caccccagct    480
gccctgacag atgggtcccc tttttctctc tcaggcacc ccagccccac actcacatgt      540
acgaagttct caccccagct cctttgtgtg cacctgat gagtatttaa agcccgtttt        600
gaaatgccaa aaaaaaaaa aaaaactcg aggggggggc cccttaaccc atttgggcct      660
taaggggg                                                              668
```

<210> 195
<211> 893
<212> DNA
<213> Homo sapiens

<400> 195
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gggcttgact ttcgaatgta aaactgactg tgccttagca tcaccctgtc cagtgccct     60
ggggcagctg gtagtgtcca gaagaatgga cacctgctcc agatttagat gcccatctgg    120
gcttttgttt gatttgcggc gttcctgtct tctgtaaagc tagtgagttg tcccaagaga    180
ctgatgccac agcttgttcg cagtttacac aaactcagct ttaaaattcc aaatagaatc    240
tgacttgcaa actctagctg cagcatgtgg agcttctaga tgtttactac cttgaatggt    300
tgtcagtgtc actgaaccac aggggagagg agtatggggt agagcaatgg tctgggccaa    360
ggaatggtga gcttagggtc ttcctctgac tccttactcc tcaggaggc agttagggtc     420
cctcttaagc aggcttctat ttcttaccac taaattggtt tccttttTca tccagaagtt   480
agaactcccc agatattcac actataggat ctgaattccg agattctaaa atatcttaaa    540
ccacaagaga gaaaatctag ttctgcctca gccccagtca gcaggccatc tgtcccttcc    600
tctcctctga gtcagacagc tctggcaagc aaggctcctt ggctagttcc taatgcactg    660
acaggagccc tcccattaag gacgacttct actcaaaatg cgactctccc tctgaacttc    720
agatgcctct gttagcagga aaaggcattg attggattgg atatatttat gtgactgcgg    780
gcatttgtgg ctgtagaatc cgtgaccgta atgttatatg taatgggaac tatcttataa    840
acttgaaaaa aataaagttt ttatttTcta waaaaaaaaa aaaaaaaact cga            893
```

<210> 196
<211> 519
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (492)
<223> n equals a,t,g, or c

<400> 196
```
tcctcacctc acatmtggct tcctccaggg gccctgatac agtgggtgat gggtcctaag     60
ggggcctcca ggacccacca gccctatgag gaaagagttc ttcctgatcc tacccctTga    120
cttcctTttc tttctcctgc aggtctcaga acggccccga agcctccccc tatcccctga    180
attggagagc tctccttgat gccctctgtt agggcccacc ccaatcccag ggcagaagga    240
catgagggag caaagagctt gaggaatgcc atactccggc tggtccggga catggaaatt    300
cggactcagg gaggacccgg gctgggcaat gactgggaga cttgcctggg ttcccaggac    360
ttgggggtcc tgactcccag ccctcatcct gccttacccc tctgttccca gccccagcct    420
ttctaagcca ttggraatag aatggcccct tttgttaaaa aaaaaaaaa aaggctcggg     480
ggggggcccg anacccaatt cgaagttgcg agtgggctc                           519
```

<210> 197
<211> 453
<212> DNA
<213> Homo sapiens

<400> 197
```
ggaattcggc acgagctgag cttgtgttta aagccgttgg ccttgctccc ccagctttgt     60
```

120
```

```
cagctcaggt ctgtctacac ccagatggta gcgcttgtga cactggcctg gcagtcctgc      120
tcacagtgtt ctgtgcctgt gtgctcccac cctttcctcc tgctgctgca gaaacccggc      180
catccttcca cacccagatc tcttgtcctg tcctcacccc accctgccac catcagccct      240
gcctggagcc acctgccctt tggcaacaaa accaaacctt tttgtgggcg ttcaagatgg      300
tattgtgccc accagtcaga tcctgtgttt tgagtcccaa aggccatgcc aaggattggc      360
tttgggaggc tttaatcacc aacccatcaa catcaagcct cccccaggcc ggttcaaata      420
aatgtattta aataaaaaaa aaaaaaaaaa aaa                                   453

<210> 198
<211> 415
<212> DNA
<213> Homo sapiens

<400> 198
ggcacgagca gcggccggcc gctctgctga gaaggcagag aggcaggctc aggcctcagc       60
gtggacagca gggataaggg gcacgaagga cggggactcg gcccccttcag aattcctcag     120
gactctcagg tgcagctttg ccaaaaagga acttttcatg tcatgcagtt gaggggactt      180
agtctcaatc ccaggctcct cttgactctg ggcagcctct gtcttgggag ctcagcccca      240
gggttcggtc gtcagcagtt tcccaagaac aagatgtgat ggcatctgct gctgaaaccc      300
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<210> 199
<211> 674
<212> DNA
<213> Homo sapiens

<400> 199
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aagcattttg ctcatattac cctgtaaggt caataattat tatccccatt ttgctgtaga      180
gaaaactgag tattctgata caactttaac tttcctgggg tcaaaaaaat tatcagtatc      240
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agtggttctt ttgactgggc atggtgctca cgcctgtaat tccagcactt tgggaagcca      360
agggtggcag attacttgga cccaggagtt tgagaccagt ccgggcagca tggcgaaacc      420
ccatctcaac agaaaatatt taaaagttag acaggtgtgg tggcatgcac ctgtggtccc      480
ggctactcgg gaggctgagg tgaaaggatt acttgaacct gctaggtgga ggctgcactg      540
agccgggatt gtaccactgc actctagcct gggcaacaga gtgaaattct gtctctaaaa      600
aaaaaaaaaa aaaaaagaga aagaaagcaa gaaagaaaag aacaaagca aaaacaaaaa      660
aaaaaaaaaa aaaa                                                       674

<210> 200
<211> 1246
<212> DNA
<213> Homo sapiens

<400> 200
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ggcaggggtc cctttacccc ctcattcttg acccttctcc agggatgctt gtgacctcct      120
taccccaccc cccatcacct ctctgtcctg aagtgagggt ttgtcaccgt ccatggcaag      180
gtgtggtgtc tggtaggctc tatgacctgc cttctctcag ggtgtttatt ctgcagcaga      240
gagggtctg cggtctgagt gtaatggtgg aaatccaggc ttccttccat ggcccaagga      300
ggcctttccg gagcaacagg gttttcctgg gactcagcct ggctttgtt aaggcaggtc       360
ccggatttac tcagaagatg ggccccagag aggaggagag gaaaggaata cctgtcagtc      420
aaacgtgaag cccactgatg acactgcctg gcagagctgc ctccggtcag cagtgaccct      480
tcaccccca gctcccaagt cctcttcctg agggagctgg tccggcttta tggaaggctc      540
cgcctgtgtt cccccactgg gtccctggtc cctcacctgt cacgtggggc gatggtcacc      600
ctccctccct gcctgccctg aaggatacac tgagatgaag gtcaggaaat ctgctggctg      660
cagaaccagg ggccatgcag gagtgaggga tggtctggtc aagttgaggc tctgccccag      720
cctcagtttc cccacacagg catgagactg tcttcctgac tttcagagga cagggctgag      780
atgggatgag ggaacacagg gaaagcgttt agcacctctg agtgctgtgt ggatgcgacc      840
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121

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tgggggggtcc tggcctccac tctttaattc tatctggact gtgtgccctc ctacctccag    900
tttccctgcg ggggcctttc acagggcctg gcttgcggat acggggtttg gcgtagggca    960
gtgcttctca aatgggaagg cgcactggga ttcttcaggt tggggtgggg cctgaggttc   1020
tgcatttcta atcagttgcc taggactggc tctaattctt gttgaattta caatcacttg   1080
tggagttaag aaaaacatac tgggccttgg ttgggtgtgg tggctcacac ctgtaatccc   1140
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<210> 201
<211> 1510
<212> DNA
<213> Homo sapiens

<400> 201
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ttatacatca catgaggctg caggccaaag ctttgcaact tatagtaaca gcacgaacta    180
cacgagggta agatgtgggg ttggccaaaa tatgtggcat gttcctttca aagatacttc    240
aaatgcattc agacatcaca cgaaagttaa tgataagtga aatgaaattt aggaaagact    300
agctaaggaa tgtgtgatct attcattttt ttcagatatt acaaattctg ttgttggatc    360
agattagacc cttggaaatc caattgtgtc tctcccttgc taaaaaccct ctggtgactc    420
tccattacat atagcacaac actggacttt atctggcaat aaggacactc tgtatcctcc    480
tacttgatag atttccttaa gaatttagtg ccagggacac tttttctgtc tgaaggacta    540
ataagctttt tctcaggcaa taaggataaa ttaagaggat gtactgggaa gtcagactac    600
tttgttcaaa tcttgtcttt tctacttact agttgtttgg ttatgaacct ttctgtacct    660
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agtgtttttt gtttcttact atttcataaa ataaaggtgc atcttaagaa tgatggcatc    960
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aaaaaaaaaa                                                          1510
```

<210> 202
<211> 1259
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<400> 202
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tggcccatct cttctgtgcc ttagtcacat atgaaagcgc ccctccctgg ctccccatct    180
gtcccacacg ctccctgggg ctcttagttc agctgctggc actcgcagga tcctgcagtg    240
```
```
                                          122
```

```
ctgggcccag agcccttgga caggcctcag gagtggtcag gaccaccaag cccctcctct    300
cccctccac acctctagac ctggggcctc cggaaccccc agcaggctgg gcttatacta    360
gctcctgact taggaagagc ctcgtgtcac aacacgtgtc cctacaggca aagtgtcctg    420
gcatttaaaa cccagattat ccctgggttt gggctgcagt cacctggaga agctggtagg    480
gtaagggaga gggaccctgc cggtgttcac tggggattct ttctttggt ccttcctgga     540
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ctccttcctt tcctcgtggc agaggcctgc atgtgggtgc cagaggccag ctctccccct    660
ccatcttggg ggggcggagc agttgggccc aagctgcccg ggagggtggg tgcagacaca    720
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agttttgtat cttgttgtat gactgccatg agttccacca gaaagccact ctattttggt   1140
ctctgtgaca ttttaaatgc gtgacagaag tgagcaaata aagtgaggaa gaaatctata   1200
tatgagataa tatagattgt attgaaaaaa aaaaaaaaaa aaaaaaaaaa aaactccga    1259

<210> 203
<211> 2101
<212> DNA
<213> Homo sapiens

<400> 203
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ccccttaggt gaggactctg cctggggctc tgctgatggt tccgaatcat ggagctgcag    180
agagctcctc cagcctggag acgttcttgg tgaaagctgt ggtctaactc caccggctct    240
tcctgcacat tgtattcaag aggggtgcct gcccccgctg actcaggagc tccggtgctg    300
cagccgccac gaatggggag gtgggccctc gatgtggcct ttttgtggaa ggcggtgttg    360
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gagctgggcc caagctgcgc tggaatcgca gcaggagagg ggagtgggct ggttcttccc   1680
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gactgagttt ggactgggtt ttggacctcc aggggctgga gcttcatcac ctgggcagtg   1800
tcttttctca gagagcaggt ttctttatag tttggaaata aatggttcac ggtccactgg   1860
ccgccttgtg ttgctggaga cgtgggggca gggaggggac agtgtgggcc tggcctctcc   1920
tttcctttcc ctgcctggag ccttcttcaa atgtctggtc ttaagccagg cctccttcat   1980
tttctcgctc ctgttagaac accagtcccc tycccagtgg ggccccactg cacctgctgg   2040
caggaaataa atgaatgttt actgagwaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa    2100
a                                                                   2101
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123

<210> 204
<211> 725
<212> DNA
<213> Homo sapiens

<400> 204

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aattggactc cttttcctgt agattaattg aggcatgagg tggactgtct cctctggtta     180
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agcatgggga gggtcccagg gggcccactt cagggttgcc tttcatgaaa aacttgtcaa     300
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tgggctgctc cagyagtttg ttgsctctgt ttatggtagc ttaagtgcaa ggttttttatg    420
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gagggagtat gtgtgtagtt tgaaaaagct tacttaatag tttagatttg gaaaatggaa     660
aaaacatcct tttgaaatgt taaagatcgt taaagaagtt tgtgatattt tcataaatca    .720
aaatg                                                                 725
```

<210> 205
<211> 926
<212> DNA
<213> Homo sapiens

<400> 205

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cagggatatt ttggggggggg atggtaaagg gtgggctaag gaacagaccc tgggattagg    180
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cttctggggt atcagagcct tagggtgccc ccatcccctt ccccagtcaa ctgtggcacc     660
tgtaacctcc cggaacatga aggactatgc tctgaggcta tactctgtgc ccatgagagc     720
agagactgga agggcaagac caggtgctaa ggaggggaga ggggcatcc tgtctctctc      780
cagaccatca ctgcacttta accagggtct taggtacaaa atcctacttt tcagagcctt     840
ccagctctgg aacctcaaac atcctcatgc tctctcccag ctccttttgc ataaaaaaaa     900
aagtaaagaa aaaaaaaaaa aaaaa                                           926
```

<210> 206
<211> 1248
<212> DNA
<213> Homo sapiens

<400> 206

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ctgtaggaaa aaaaaatcta gtatcatgtc ataatatccc cattgcctat stccatatac     120
cttttccttc ttagagctca aagactgttt cctaacatac tgtgccttttt gctatttcct    180
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tcatgagcag ggtcagggtt ttattcattt tggtctacca ggcaaccagt cacattcagg     480
acaaatagtg tgatctcagt atgtttagca tgagattata agtaaataca aatggatgta     540
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acattgtcag tactaggtct ccaatatcta gttctcacac atttccgatc acttcaggat     660
gaactagagt atgcccttac agggatcagt gtcattcaag gatgtgactg tggacttcac     720
```

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caggaggagt ggcagcaact agaccctgct cagaaggcgc tttacaggga tgtgatgttg    780
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ggtgggcaca tgcctgtgaa tccccagcta ctctgggagg ctggaaggca cgaaaaccac   1140
ttggaacctg gggagaccag gttgcagtga gttggaggat tgtcaccact ggcactccag   1200
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```

<210> 207
<211> 824
<212> DNA
<213> Homo sapiens

<400> 207
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tagcatcaag atgaagaaga agagacagtc tttcgagagg tggtcagttt tccccggacc    120
ccctgccaga tattatgaca aggacaccac caaaccaatc agcttttact tgtcttcgct    180
ggaggagctc ttggcgtgga agccccgctt ggaggatggc tttaatgtgc cctggagccc    240
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tgatgggcgg gtacctggat gacaggtgag gacctggcct tacattgatg ttgcttacat    360
tgttctcctt tgctggggtg ggggctggag gggcgggaga gagtgccatg tgtagaaaga    420
gcactgggcg gggaatcagg agacgggcat tggagggatg gcactaactg cgagaagaag    480
gcaggcccca gtgtttcatc tgtaaaaagg gaagactggg ctgggcttgg tggctcacac    540
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gaccagcctg gccaacatgg cgaaactctg cccctactga gaatggaaaa gttagccagg    660
catggtggca ggtgcctgta atcccagcta cttggggggc tggtgcggga gagtcgcttg    720
aaccagggag gcggagattg cagtgagcca ggattgcact actgcactcc agcctgggca    780
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```

<210> 208
<211> 2206
<212> DNA
<213> Homo sapiens

<400> 208
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cagtcccatc gacgttcact gaacattggc tttctctttc tgactcctgc ctgtttttagt    180
ccactatata ttgctgtatt tgcttaaatg ctggaaagta actgttaaaa tgtgaaattg    240
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tagtagatat atcaatgtaa aaacaaatac ctaactgtac agtgagtgtg ggggaaatgt    360
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acttgttcat caccattact gaaagccgta ctgatcagtt agttgacaac gggcattttt    480
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gcagtgtgac tgtttacatg gtttggcaat aggtttgatt ctgattgctt cagagtggct    1920
ggtctatttt gtttcctttg gtttccttcc tccccaaatt gtgacaggaa aaacagacca    1980
aaaccaccct aggaaattgc tggttgcctg tccccacgtg atgataaatg ttgccctctt    2040
ctggatatcg tttctctacc ttacgaccaa acgcccgtcc tatagagtgt ctgattggat    2100
cctctgtcgc gtattctgat ggtgcctgct ggtttgacgt ggagctatcc tgtgaaataa    2160
aacagcttaa cttttctcaa aaaaaaaaaa aaaaaaaaac tcgtag                    2206
```

<210> 209
<211> 1421
<212> DNA
<213> Homo sapiens

<400> 209

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gaattcggca cgagttcaag tataaattgt ttttgacatt aagaccaact cctgttcatt      60
acaagcacct gaccaactgt cttaatagaa ggtactctag actcagtagc ttataaacaa     120
cagaaattta tttctcacgg ttctggtggc taagaagtct gagatcaagg ccccaataaa     180
ttaggcctct gatgagggcc tgtttcgtga ttcgtagatg gtaccatctt gctatgttct     240
cacataatgg aaagggaaag gcagctctct ggggcctctt tttattagtg cacgaatccc     300
attaatgagg accccaccct tatggaccta atcactcccc agccacgcct cccaatasgw     360
tcacattggt aattaggttt caacatatga attttgtgga gagacaagca ttcggaccat     420
aacaacaaca ttcttaaaac taccattgta ggccaggggc agtggctcac aactgtaatc     480
ccagcacttt gggagcctga ggtgagagaa ttgcttgagc ccagsakttc aaracctgcc     540
tgggcaacat agtgagacct catctctaca aaaaatttaa aaattggctg gggtggtaka     600
gcaagatgtt gtctcaaaaa aaaataaaca ccattgcagg ctagtcagcc actattasat     660
tgtggaatct actgtgtatt ttatgtacca gaaatccagg gtcttaaact tttttgctga     720
gctctgaaga taccaccacc atgcatcata ttttcaagta gcctctagga aatgccttgt     780
agaacccaaa ttgaaaacta acgtataact ctttatgttg tgaaggtggt cctaatgaaa     840
tctaaccatc cccaaaagtg tcttccatac ctgactcata cctttagcaa gtgacatcac     900
attaaatttg tcaaaatcag tctttaatac cttatttaga attatgcagc tatagaagga     960
acatggagga aattatagag ctgtgctgcc caatatggct agccactarc tcacatgtgg    1020
ctgtttaaat ttaattgact taattgaaaa tataggtcct cacttaaact agccacattt    1080
aaagttcaca atagccacat ctaartagtg actaccgtat tgacaacgca gatgtagaac    1140
tatgtagaac atttgacaat actgtctaga aagtactgat acaaaaagca ctttagttga    1200
tarttgctta tatatttata taaaaatgcc tatatgatga cttctcaaga gaaaagattg    1260
tttataactg gaacctataa ttttatttca ttgtgccaga aaagtagctt ttaaatttat    1320
aaattctact tttttccctt aaactcctac ctatctcccc ttttatacta ataatcttat    1380
aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaatcc g                            1421
```

<210> 210
<211> 630
<212> DNA
<213> Homo sapiens

<400> 210
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ggcacgaggc ctttcattgc ctgcctgtgc tggccatgct tctgctacca ggctgggcct      60
gctcatgggg cccagtttct ttttcctctt cagtgtggcc ttctctatct tcagggttca     120
ccttgctctt cctcctaatc tgataaagaa tgtttcagac ctgtgatttc cccagattgg     180
actcctgtgt tctttcattc gacattgatg gttctcagtg aggctgcaat acagtctttc     240
tctcaactat cctacagatt ctcttttgca acagctacta ccttctactc attccttcct     300
cctccacagt cctctcttct ctcatgagtc ttctgagact atcaggcggc tggttctcca     360
ccacagggct atctctctac atctctgact tctttgcatg actgctgcac gctgggctct     420
ctgggccact tctcccaccc gaactaagcc ctgcccccct gtctgctctg ctttgattcc     480
ttacatgctt gatttctgtt ttgagactta tctgacattt attgtttgta atgatccttg     540
tggaacccaa atcctttgat atgactacct gggcattggc ccaaatcttc tctgaaattt     600
```
```

126

```
ctatttgggt taaaaaaaaa aaaaaaaaaa                                          630
```

<210> 211
<211> 1408
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1401)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1402)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1403)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1405)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1407)
<223> n equals a,t,g, or c

<400> 211

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ggcacgagta atacagttag gtgccactgc cttgattggt gccaaggcac caggaatttt     60
acccaccatt gcttttgcac catcactgca tctctttaac acagtgaaag aggcaagtag    120
catgtcagtg tcattgaata tgaatgaaaa agttactaga ttccataatg ctttcctttt    180
tccaaatcat tggtattcgt gattccctta attatgatcc tttgtgttgt agatatttca    240
atgctaamaa cyggttctag tcttctcaaa gaggaggagg aagatggtca agaaggcagc    300
attcacaatc taccacttgt aacatcccaa aggccatttt atgatggacc catgccaact    360
ccccggcaaa agccatttca gtcaggttct acaccgttgc atctcactca cagattcatg    420
gtgtggaact ctattggaat tattcgctgc tataatgatg agcaagacaa tgccatagat    480
gtggagttcc atgatacctc catacaccat gcaacacact tatcaaacac tttgaattat    540
acaatagcag atctttccca cgaagctatt ttgttggcat gtgaaagcac tgatgaacta    600
gcaaggtaaa ctcaagatta ttaggaagaa tttggcactg ttgaactgtt agatacagtt    660
gttgaaatta aagacaaaaa gttaataaaa caaaatttat ttttgtaat atgaaatttc      720
agaagagttt ggtacaaaca ccagcacacc caaaatacct cagaacatat gtctgttttt    780
gccataatga ttccctcatt acatgctcta actacatagc aaaatgacat ggcatagtta    840
gtaatgcaag agatgggatt ttttttttac attgktaagt gcttttttt ttttactat      900
tataagagta atatacattc attgtaaaga aaaaaaacca gtatacagta tagaagtttc    960
ggaaaatgaa aactcctccc agaattctac tctcagatat aactgctatt tacaatttgr   1020
tatgtatcct tccagatttc tttctatttg aacctccctt attttaattt actttattga   1080
gatgtaattt atttacaata aaatgcaccc atttgatgag ttgacaaagg tgtatataca   1140
cagataaccc ctaccacaat caaaatacag aatgttcttt atcacccgaa aatgttttct   1200
tatatcccctt tgcagttagt tcaaccctag ccttggccaa ctattagtct agattttgt    1260
cactacgtct ttatcaccca agaatgtttt cttatatccc tttgcagtta attcaacctg   1320
agccttggcc aactgttaat ctacattttt gtcatgatgg attaaattta aaatctctct   1380
tcgagaaagg aaaaaaaaaa nnnanana                                       1408
```

<210> 212
<211> 785
<212> DNA

127

<213> Homo sapiens

<400> 212

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agagcggcac gagcggcacg agtcctggcc tgcgcggctt ccggatcctt ggtctgcgct      60
ccagcgtggg cccggctgtg caggcacgag gtgtccatca gagcgtggcc accgatggcc     120
caagcagcac ccagcctgcc ctgccaaagg ccagagccgt ggctcccaaa cccagcagcc     180
ggggcgagta tgtggtggcc aagctggatg acctcgtcaa ctgggcccgc cggagttctc     240
tgtggcccat gaccttcggc ctggcctgct gcgccgtgga gatgatgcac atggcagcac     300
cccgctacga catggaccgc tttggcgtgg tcttccgcgc cagcccgcgc cagtccgacg     360
tcatgatcgt ggccggcaca ctcaccaaca agatggcccc agcgcttcgc aaggtctacg     420
accagatgcc ggagccgcgc tacgtggtct ccatggggag ctgcgccaac ggaggaggct     480
actaccacta ttcctactcg gtggtgaggg gctgcgaccg catcgtgccc gtggacatct     540
acatcccagg ctgcccacta cggccgaggc cctgctctac ggcatcctgc agctgcagag     600
gaagatcaag cgggagcgga ggctgcagat ctggtaccgc aggtagcgcc gccgccgccg     660
ccgccggagc ctgtcgccgt cctgtcccca gcctgcttgt gtcccgtgag gttgtcaata     720
aacctgccct cgggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     780
aaaaa                                                                  785
```

<210> 213
<211> 1767
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (183)
<223> n equals a,t,g, or c

<400> 213

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ggcagaggag ccgccgggtc acccaatgcc ccagcctggc ttcatcccac cacacatgag      60
tgcagatggc acctacatgc ctccgggttt ctaccctcct ccaggccccc acccacccat     120
gggcttacta cccccccaggg ccctacacgc cagggcccct accctggccc ctgggggcac     180
cancagccac agtcctggtc ccttcaggag ctgccaccac ggtgacagtg ctgcagggag     240
agatctttga gggagcgcct gtgcagacgg tgtgtcccca ctgccagcag gccatcacca     300
ccaagatctc ctacgagatt ggcttgatga atttcgtgct gggtttcttc tgttgcttca     360
tgggatgtga tctgggctgc tgcctgatcc cctgcctcat caatgacttc aaggatgtga     420
cgcacacatg ccccagctgc aaagctacat ctacacgtac aagcgcctgt gctaacggag     480
ctgggactcg ggactccccc gcctgtcagt ctggcccccct gtgctttgct ccctgygctc     540
agtggtcact ttcccgctcc cacttggggc tgggagccgt gccaccatcc cctagaagtc     600
ctgtcctctt caccctgccc tacctgagcc gctgactctt ctggcaaaaa ttctgttggg     660
atttaaggcc aagggtcagt gggtggcagg gggctgrcaa tgagcttgtg tgttgttggt     720
ctgcttggtg tgtgtgatcg ggaagataag ctgggagggg tctcctgctg gggtcctgat     780
gcctctgttt ccaaacaagg tacaggttca gtccagactc tttccccctg ggaccaacag     840
cagccagagc agttagccag ttagtcccca ggcctgtggc acaggcgttt ctgacctgct     900
gggccgagaa tgggtaagtt gtctggagtc aggtgggccc acgtaggaca gggtcacaaa     960
gcctgggttt gtttctgggt actttgcgcc tctggggtgc tagaggtggg gcatggtggc    1020
tggaagtaaa actgccaact ctggccctca gaactctcag gtatagaagc ccaggatgtc    1080
taataccctg tcccagtgcc cgagagctgc ctggtgtcag gtagagagga cactgtacct    1140
gggtgaatga tcagaccctg gtagctaaga aggaacttgt ccctttgagt cagtgtgcag    1200
accccctttc aggccatgcc tctgtgaacc ctgtattgct ggggccggaa ggagcccctg    1260
agcctagccc cttcccgtct gccctgtgtc ctcactgcgt gtgggtatga cctctgcctg    1320
gtggctggtg tatcccaact gggcaagaga tggcagaggg tcccccttgt gggtgcgctt    1380
ggatgtgcag agccttctcc atggattttc ttccctgtaa gtgccgggcc cctcacccca    1440
gctgacaggc tgttgctgtg cctgctcaca cctgctcctg caggcacact gggctaggga    1500
cgaggaagga gcagccacaa gtggtagaac tgccttggtg gacaccagcc tcgccctgtc    1560
tttatttcct gaatggtttg tgaacttgct cacctggacc actgtatcct gccactgtcc    1620
ttcctggtct cgcactgcca ctgcatggcc tcctgtcact gtgaatcgtg gcccagtctc    1680
agtttgtagt ttctcattaa attggccctt tcactccccc gcaaaaaaaa aaaaaaaaaa    1740
actcgagggg gggcccggta cccaatc                                        1767
```

<210> 214
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128

<211> 781
<212> DNA
<213> Homo sapiens

<400> 214
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ggcagagtgc taatcaccct atggaaagaa taataaagca tggaatgaac aagcaaatag    60
caagagctct tcaaagaaag ttgtcattaa cactttacag agaatagagg taggctcccc   120
caggaaaagt ttgcataaat agccctggga gcagctgaga aagaggaaat gaaatgacat   180
tcaattaact cctaatttgc tgttgcagtt tctcctgaac tgagttcact ccagaattta   240
ccaagggatc aggctgctta agaactaatt acaatgaatt ctccatgagc ctgctgacag   300
tctgtccttt ctatgtaagt cctggggttg ttgccagcca aaaaacctta ggcaaagttg   360
tcttctttta gtaaaggttt tccagcctcc ctttaatttt taccaagaaa agcacagcat   420
atcaaggcgt tagacagctt tattatttct cttaatgtca agttatcaaa ccccttagaa   480
gcctggagag agaggcaggt catggtggct cacacctgca atcccagcat tttgggaggc   540
ctaaatgggc agatgactca aggccaggag ttcaagacca gcctggccaa catgttgaaa   600
ccctgtctct actaaacata caaaaattag ctgggcctgg tggcgcatgc ccataatccc   660
agctactcag gaggctgagg caggagaatc acttgaacct gagaggtgga ggttgagtga   720
gccgagttca tgcagcctgg gtgacagaat aaggctccat ctcaaaaaaa aaaaaaaaa    780
a                                                                  781
```

<210> 215
<211> 2115
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1310)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1351)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1861)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2091)
<223> n equals a,t,g, or c

<400> 215
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ggcagagtgc gcccggccca attacttctc tgtaattttt ttcccctgag gattggtggg    60
gaaaaaaaat gcttggcaca taacactcca tgttaagttt caggattatt tcttcttttt   120
acattatttt agtttttttgt tcatatgtac tcagggctca cactttgctt ggctccgtaa   180
gtcctagaga aaaatggtat gagaaatgaa ttcacatgaa gcattagtgc cttagtctct   240
tactgttttt acctttcccg tgaatatttg tgctacaaaa tggtgtccag aaaggcagtg   300
cctcagcgag ataaatatgt ttctaatctt agcatcttgg gcagagtgag gctggcatct   360
gaggtcaggg aggccacagg gccacgctac tgaccgcatt ggtaacagac tccattargt   420
tgacagaaag gttaaggttc ctggaatctg tctctaaaty ctccgtaccc cctcattagg   480
ttagaagcca atgccaatac aagtaaccaa taccaaaccc tctcttgctt acagaggcat   540
tattaagttg ggggctccct aagaacaatt cattgcaaat aattgttggc acatttattc   600
tcatggcaca actttcaaaa gcaaattaat tataaactgg ttgcaattta attcagtttg   660
yctggattat gtgtttgcaa ggcctagagt acatttggca ccgttgctgg cacatttgga   720
ttttaatgtc tttgacaagc cacagcttcc ttggcctggg taaacggcct actgccatac   780
ggtcatttaa ctagattgcg tcagagtgac tctttagctt cgcggtgggt cttcagttta   840
caacctccac gccacecccat cagccgcacg ggcatagatc tcaacatgta tcaggaaact   900
```

129

```
ggaagaaagc tgtgaacaga atactctgag aaaatgatgg ttaatcgtgt agaaaagttt    960
aactatttgc atcagcacaa tattacacag gcacatacga ctttcagttc cctaaacctg   1020
agaaaaggtt taacaacatt gtgtgaaatc tgacatcttg ctattcatat aaatgtgaaa   1080
ggcagattgg gaaaaataca gtaaaatccc cgcttttgtg cagagaatgg tgcatatttt   1140
tcccctaatt atggaaggta gccttttatt tcttctgaat tcattcattt ctgagcctgt   1200
gttttcagct tgcttatgaa actcaattat aaaaccaggg ktaaaaatta agtcaagtca   1260
caggctatac tcctctttga ttctggggct cctgagaact tccagccctn tgccactggc   1320
ttgaaaaatc tctaccctta caaatctctc nragctttca trmacctytc tacacagsag   1380
attaattaag gaaaaagatg gaaaactcct ggcaccattt tatctttcca aactgtgatt   1440
tgcctcttcc ccctaaatct tcccttccct ctmttctgct cctttctcaa aaagaaagtg   1500
tatgattgtc aactttctga gttcaagaca gtggaggatt aaactggcct tactgagatt   1560
tgaacttgtg actcaagtca ttggattttg tgaaagaggc ccaaactctc cggactggac   1620
aggttacagc tccggtttct gtccctctgc tgccttttcc tgggtagcat gatgatctct   1680
ggcatttatc tatctatgag gcttgcaaaa tcgcggcctg tcataatggt aamtaaaatg   1740
tgttaaagtt aatatgaaga agaaaggagc aattacaact gcttaaaaca gtcttcaaat   1800
atacttaagc agaggtttgc cacgtaaaca cacaattaaa gcaggaattt gtgatggatg   1860
ncaagggttt gacggtccca gacatactgt ttactggtgt agttagcaga tggataagtc   1920
aactgatccc agatgtgcag cttataaata taaactcatg tcttactagt gatgtatgtc   1980
tgcaagtagc aacaaattac tttctattta actcttgact gtttactagg gggagctttg   2040
taatgctcac ttgcttaaaa aaaaaaaaaa aaaactcgta ggggggggccc ntacccaata   2100
gccttatgat gaaac                                                     2115

<210> 216
<211> 1148
<212> DNA
<213> Homo sapiens

<400> 216
gccattcacc tattgatgaa tattggagtt gcttccagtt ttaggctact gtgaaaaagc     60
tgctctgaac attcatgtgc aagtgttttt gtggatatgt tttattctct tgggtaaata    120
tctaggaata gaattttggg tcatatggta agtatgtgtt tataagaaac tgatgttatt    180
ttttaaattg gctatataat ttttcagttg gctttatatt tctactagga gtgttccaga    240
ggctcctcat cccttgccaa cgcttggtat tttcagtctt ttagccattc tactggagca    300
gtagtatttt attgtggttt taattagcac ttccctgata actaataata ttgacccatt    360
tcccatgttt cttttttatta tatgctttat tttgtgaaat gtgtctatga gtttttttata   420
tattctaggt acaggtactt tacaaatatt tcccatttct taataatgat accttggaag    480
atcagatggt tttaattttt aggaagtctg atgtatacat ttttctaggt cactaatttt    540
gtgccctatg aaaactttat gtaccccata gtcaagtaca ttttttccta tgatttttta    600
aattttataa ttttagccaa atagttatag tttttatgtt taggtctgtg attcattttg    660
agttaaattt tatggtttaa ggtagaggtt tgaggttcat gtttttttcc tccattttag    720
ttgttctgta gcagcattta ttgcaaagat attctttctc aatggaatta tactggcaat    780
attgaaaatc tgttatctgg actctattct gttccattga tctatatgca ttttctttgt    840
atcattacca ccttgtcttg actactttag ctttgtagta attctcaaaa tcaggtagtg    900
agtccttcag ctttgttctt tttcaaaatt gttttggctt atatctttct tatataaatt    960
ttagaatcag atcatcagtt tctgcaaact gagattgtgt tgaatctgta gatcaatttt   1020
gtgtcttaac atcccccagc aaagttagaa agccaggcag taatatcaga gggcacaagc   1080
ccagattgaa gctggaagac atagtgctcc agaaaggtcc ttccaaaaaa aaaaaaaaaa   1140
aactcgta                                                             1148

<210> 217
<211> 1131
<212> DNA
<213> Homo sapiens

<400> 217
ggcacgaggc cttgtgtcag tagtcagtgg tgttccttta gtccttgtta tgttaataaa     60
aaagctttgg ttttttgcaag actttgtttt tagagattct ggaaaggaac atattaacca    120
aaaagaagag ctgacttcaa ttttacttgt cttgaaaata actgactact aaaggggatgt    180
caggggaacat tagtgaaaat ggagaactta aggagttaaa gttttagctg tttttttttcaa   240
aggatattgt ccttcaaaat cttttacctttg gcatttttgt tactgtgatt taagatggtt    300
gtaattatca ttgattgatg atacctatca aaaggcaacc ctaaccaacc atttctggct    360
```

130

```
        ggattctgaa tgccgagaaa gaaaaactga gaaatttgtg aactattaca agtcgtctgt    420
        aaaatgagat aataatatca acttcacaag gtaatttagg ctttcgtgaa aactagagtg    480
        tgaaaatgct tagtaatgtg ctgggcacac tgcaggtgct ctacaaataa ctactgataa    540
        ctactttttt tcatgagtaa ttgtacattt tctttcttcc ttcctttctt ccttccttcc    600
        ttccttcctt ccttccttcc ttcctttctt ttcttttctt ttcttttctt tcttttcttt    660
        ctttcttttt ttgttttctt ttgtttttgag acaagatctt gctctgttgc ccaagctgga    720
        gtgaagtggt gtgatcttgg atcactgcaa cctctgcctc ttgggctcaa gtgatcctcc    780
        ctccttatcc tcctgagtag ctgggacaac aggcgcacat cgtcacaccc agctaatttt    840
        tgtatttttg tagagatggg gcttcacttg gtgttgaatt cctgggctca agcgatccac    900
        ccacttcgac ctcccagcgt gctgtgatta caagagtaat tgtaaattta aaatgaattt    960
        ctttcccatc ccaaaccagt atcaaaatgc aaatatagta aattactttt taaaagagag   1020
        atgtttaatg gcagttgttg gtagtctttt gagtctttaa gtgggtatat tatagaaaaa   1080
        caacatatct ctgcttggag ggaagattta actaaaaaaa aaaaaaaaa a             1131
```

<210> 218
<211> 1117
<212> DNA
<213> Homo sapiens

<400> 218
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        attgagcttg gtttccgccg gcacccagcc cgaatcaatg tgcaactgcg ccacacggcg     60
        gtagtcgcgc ttgaagaagg caaacaggtt gcgcgccagg taatcctggt cttcaggggt    120
        gaggctgccg acgatgccgc agtcgatggc gatgtactgc gggctccacg ggttgacggt    180
        gctgacgaag atgttgcccg ggtgcatgtc ggcgtggaag aaactgtcgc ggaacacttg    240
        ggtgaagaaa atctccacgc cgcgctcggc cagcatcttc atgtcggtgc gctggtcggc    300
        cagggtcgca aggtcggtga cctgcacgcc gtaaatgcgc tccatcacca gcacttttgg    360
        ccggcaccag tcccaataca cttgcggcac gtacagcaat tgcgaacctt cgaagttgcg    420
        tcgcaattgg ctggcgttgg ccgcctcgcg cagcaggtcg agttcgtcgt agatggtttt    480
        ttcgtagtcg gcgaccacgt ccaccgggtg cagcaggcgc gcatcggccg agaagcgttc    540
        ggccgcgcgg gcgaggacaa acagccacgc caggtcctgg ccgatgatcg gcttgaggcc    600
        tgggcgaatg actttcacca ccacttcttc gccggtcttg agttgcgcgg cgtgcacttg    660
        cgccaccgac gccgaggcca ggggctcgac gtcgaagcgg ctgaacacct cgctgatctt    720
        ctggcccagc tgttcttcga tcagcgccat cgactgctgc gagtcgaatg gcggcacgcg    780
        gtcttgcagc agcatcagct cgtcggcgat gtcttcgggc aacaggtcgc ggcgggtgga    840
        gaggatctgc ccgaacttga tgaagatcgg ccccaagtcc tgcaacgcca ggcgcagctg    900
        gcgccacggc tcaacggcga cggcttgcgc ggcaaccagc gccacggcag cacataacgc    960
        accgccagca aaaaccacgg caagggcagg gcaaacagca ggtcatcgag acggtagcgg   1020
        attacgacgc gctggatacg aaacaaacgg cggacggcga gcagcttcat gcgttatcgc   1080
        ttggatcaag ggaacggctc aagcgctcga agcgggc                           1117
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<210> 219
<211> 963
<212> DNA
<213> Homo sapiens

<400> 219
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        ggcacgagag aatttcacaa tatgcttaca gtaaatattt cctagcttgt tgaaatgttc     60
        aattctttgt tggctttctt cttgattctg tgggggtgta taacaagcct gaaggacatt    120
        gtaatcattt cttacaaggt gaaaattaag aaagattgtg tatgagagcc tatatagttg    180
        ttttatccat tatcatcttt gattaagact ttaaaaaaat gctatttcca gttaatgcat    240
        ttggccctat tgaattttca gggaccagaa aacattaaaa agttctgcat cttataatgg    300
        taaccaatta agcttgagat tgttctgaaa gtatcaattg ctttaaaact gttgtaagta    360
        cagttggcaa gatctccaag ctgaaactta cacgttaaaa cttttgcctg taagaatttg    420
        cacatgaatg ttaatggaaa acacaaaact taagatggcc caaacaaaa gccacaaaca    480
        gttcatcatt tggtgcttag tctttgtaag ggctctctgt ggtttgactt actccagcta    540
        ccgttaaatg agggcaaatc accttaaaac atgttcattt gattcataac aaggaaaatt    600
        gggtctatga ttttttgcca atcttagcct aaaagaaatt gctttagctt ctggtcagca    660
        ctgattaaaa tgtgaatagt gaagtggcta tcctaaactg gtttatctcc acccacacta    720
        tcatagattt cttaggtaaa tacaattctt atctagtggt attctacttg tattcagaat    780
        actgtattaa aattttacta tttcattttt gtattctgtg cttatttttt ttgtcacgca    840
        tgtatgctta gtataaatgt gtcacttcta aagttttgtc tctgactttt agaaataaat    900
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                                131
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ttcagaaaaa ttgtttcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa        960
aaa                                                                      963


<210> 220
<211> 2884
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (52)
<223> n equals a,t,g, or c

<400> 220
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cccctccaaa gacctaaggg gatcccccgg gcctccaggg aaatcggccc cggagtacag        120
agaaaaaacc aacaccttcc tgtgcagtcc tgttggaatt tggacttgcc atgaggtgtt        180
gaagccttgt ttcactgagt tggagagact ggacctaaat ggcgcacatg actttgctcc        240
agcctggctt aatttcccta ctccaccatc atcaacaaag tcgtcattga attttgagaa        300
gcattctgaa aactttgcat ggacagagaa tcgttatgat gtgaaccgtc gacgacacaa        360
ctcttcagat ggctttgatt ctgctattgg rcgtcctaat ggaggtaact ttggaaggaa        420
agaaaaaaat ggatggcgta cacatggaag aaatggtaca gaaaacataa atcatcgagg        480
tggataccat ggtggaagtt cccgttctcg tagcagtatt ttccatgcag gaaaaagcca        540
aggactacat gaaaacaaca tacctgacaa tgaaaccggg aggaaagaag acaagagaga        600
acgcaaacag tttgaagctg aggattttcc gtctttaaat cctgagtatg agagagaacc        660
aaatcacaat aagtctttag ctgcaggtgt gtgggaatat cctccgaatc ctaaatctag        720
agctccaagg atgctggtca ttaagaaagg taatacaaaa gacttacagc tatctggatt        780
cccagtagta ggaaatcttc cgtcacagcc agttaagaat ggaactggtc caagtgttta        840
taaaggttta gtccctaaac ctgctgctcc acctacaaaa cctacacaat ggaaaagcca        900
aacaaagaa aataaagttg gaacttcttt ccctcatgag tccacatttg gcgttggcaa        960
ctttaatgct tttaaatcaa ctgccaagaa ctttagtcca tctacaaatt cagtgaaaga       1020
gtgtaatcgc tcaaattcct cttctcctgt tgacaaactt aatcagcagc ctcgtctaac       1080
caaactgaca cgaatgcgca ctgataagaa gagtgaattt ttgaaagcat tgaaaagaga       1140
cagagtagaa gaggaacatg aagatgaaag ccgtgctggc tcagagaagg atgacgactc       1200
atttaattta cataacagca atagtactca ccaagaaagg gatataaacc gaaacttcga       1260
tgaaaatgaa attcctcaag agaatggcaa tgcctcagtg atttcccagc agatcattcg       1320
gtcttcaacc ttcccacaaa ctgatgttct ttcaagttca cttgaggcag aacacagatt       1380
gttaaaggaa atgggctggc aggaagacag tgaaaatgat gaaacatgtg ctcccttaac       1440
tgaggatgaa atgagagaat tccaagttat tagtgaacag ttacagaaga atggtctgag       1500
aaaaaatggt attttgaaaa atggcttgat ctgtgacttc aagtttggac cgtggaagaa       1560
cagcactttc aaacccacaa ctgagaatga tgacacagag acaagtagca gtgatacatc       1620
```

                                   132

```
agatgacgac gatgtgtgaa ggatttccta acagctttag aaatcttagt gtgatacatc    1680
tctcatacag tttggggtga attgtaaaaa tgaagaacta taatttatgt agtgaaatac    1740
cccattagaa gaggattttt tgggggactt caatatgaag aaaaccaaga atgtttgtt     1800
gggctgtgtt gaacattatt tctttgtaaa tgaatgttgt aggaatgagg acttgggttg    1860
gtccaacatt gactttcttc atcactgcaa catttctctg actagcaatg tgacgatgta    1920
acaaatgaga ttttctcatt taataataaa aaattgtgta atgttttgca aagcttctgt     1980
cttaaaatgt ccaggtctta agaaaaaagg cagcttacac tgtttttgctt gcagagtcat    2040
atcttttttcg tacaatggaa atcctcaagt ccactttgtg cggtctccct ctccttcccc    2100
caaaaaacaa caacaacaaa acaaaaacca aaaaggaaaa tgtagcatgt tggctaaaac    2160
tggagcaaag tgcactaaaa caatttcctg aactcacctg ttgtactatt cacctttttaa    2220
accataaatt gctctttagc catttgtagt gcagtaaatg ttacaggaaa agacttggca    2280
cattttcttc caaatttyaa gaggtgattt tcaaaagctt tattggggta tgttgtcaga    2340
ccagggtttt cagagttgat ggaaaagagt cttgtgagaa aacttatttt gataaattat    2400
tacacacgca gaaaaactga tcacactgac tggatctgtc cacgacatgg aaaataaact    2460
ggattttcag aatatkgttg ttttctgtag tgttcaaggt attgtttcta aacataaaca    2520
tactctaaac atgctttatt cacttgttaa agtcatactt ttaaaagtaa tmccttacta    2580
aagatggtga ttacttttcc gaggtcagaa aaggaaagct aagcgttttc attatcaaat    2640
acacaagctt attaaatgaa tgactgttaa ctactttatt ttcatttgca cattaatttt    2700
ggaattgttt ctgttttgct gctgacggaa atactatttt ggctctgtgt atatttgtat    2760
tttgatttttt ctggtttgtt tacccccatt tgctttttagc tcccccttat gtttaaatat    2820
attctaactt atgtaaagag cataatctta gagcaaaaat aaaaaaaaaa aaaaaaaact    2880
cgag                                                                 2884
```

<210> 221
<211> 1014
<212> DNA
<213> Homo sapiens

<400> 221
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ggccgagata attctggaag tgatggattc ccaccatatg cctataaaat gttagaatat      60
atttttctag ggagaaggtt cacacttgtc atcaatttct caaagtatcg gtaatgggct     120
ggggcagaaa gcccaggggt taagatcagc tgttccataa atttcaaact gagtcatttt     180
ggttttatct cagtttggca gttactaaat agacttagtc aaaggaggat aattgaaaaa     240
ggacaggcag tccaggaaga gactaaggat tcttgaatac agaagggacc ttttgaacac     300
tttacatgcc tacgcacctg aaatgttagt attaactttt gtttcagtat accatttgaa     360
tgtgtttatg tatctaatgg tattttgtgg gtgcttttca tgatcagcaa tggcatttgt     420
actgaattac attttttttct gttaatagga cttaattaaa agtactgcct acagtgtagt     480
ttaaattttg taaacgagag aaaaaattct gcataaaggt tcatgaatgt gtgggcagga     540
ttaaatatac caaccaatcc tgttaaaaat ggctgggttt tagtttttata ttttgcattc     600
tactgtgtca tggtatgtac tggtagtaat ggtagaaacg tagaatctat acacacacac     660
acacacacac agacacacac acacagacat gtgtccatgt tttaaagcac ttagtaatgg     720
caagagtcct ttttatgtat gtaaagatgt gatttctgat tacatttatt actcaatttt     780
cttgaaaagt taaggatgct taattgttaa cagcagttag ttaaaagcag aagatagcat     840
tttaagggag ctgacatggg aggatcacct gagcccagga attcaaggct gcagtgagcc     900
gaaatcatgt tattgcacac tacactccag cctgggcaag agagaaaaga ctctgtaaaa     960
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa          1014
```

<210> 222
<211> 743
<212> DNA
<213> Homo sapiens

<400> 222
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ggcacgagca gggctgtcct ctctccacag ccaacagcca ggccttacag tggggcaggc      60
ttagtgactg tgcctcagtt atgctgtacc tgggagtggg caggccctct cccatgtcac     120
catcaaaacc cactgatgaa ggctggtggg agtctgaggg ctgcacccgg gtatggtgag     180
ttccctcag ggattgtgct gagcgccttg gcctggcttc ttggctccgc ccacctgctc     240
tccctgccac caagttgtct tccccggggtg gcatgtgcca cttggctgcc tcgtgcctgg     300
gcacagtggt gcctattatg ggccctccag gtggctctgg tgctcagcct gctgtgagca     360
ggaacagctg agtcccaggg gttcttgcac acagcagggc tcgggtttga atccaggctc     420
tgctgcttgg tcgctgcatg agcttctgct gtgctgacct ctctggtttg tctcgtcatg     480
```
```
                                        133
```

```
  tgtaaggtga caccagatac ctacctctta gggctgcccc gagactaaaa taagaccatg   540
  tgcatgaacc acttaccaaa gtgcctgttg ctctccaggt gtgcctaccg catgttgccg   600
  ctgctgtttc tgctgggacg tctgactcca gttccttctc ccctctccag tgacaaggtc   660
  atttacaact tacatttaca atttatagtg tttaccagta ttaaattctc agccactcct   720
                                                                        743
```

<210> 223
<211> 1118
<212> DNA
<213> Homo sapiens

<400> 223

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  ggcacgagaa aaaacccagg agagaacact tgttaccgtg atacacagtt tactgggaag    60
  tagtgcagaa attgattagt gtgacatggc gttttaagtg gatcctcaca acacttgagc   120
  ccaccacagc agcagcagat gtctgtggta gtaggacatt attatcacag tagtacagtg   180
  tagtctatgg taaattttat gcagttgtga tacaaattaa aaagaaaaaa ataatgaatt   240
  taaaaatatg cagttgtgag ttaatattgc atctttacat ttctgtcaac tgcagatgtc   300
  accatctatg gtcagtaagt gattgtgtgc ataaattttg ataaagttta actttgtata   360
  atagatttgt gttgatttta tggtagtaaa tggataaaat aggctagtat ctacatatat   420
  tttatgccat tcaggacata tccttttcct aagttttttt ccaattttg taggctgtgg    480
  gagttcatct gtgagttty cagattgtta taaatcgcca aaaaattgcc caatatattt   540
  attgaaaaaa actctcttgt aagtggaccc atgcagttca aacctgtgtt gttcacgaat   600
  caactgtatt gccaaatttc ctacagaaat tgtgcattaa tattcttacc agtggtatat   660
  ggccaatcat atccctttct ctgctgccta gtcaccccta ggtattgtta cattattcca   720
  taaatattta ttgaacactt attatatcca ggcactctta gaggtgctgg gaatacatct   780
  atgaaaacca agtccctgcc gtcatggaga tttcatttta ctgaggggac acagatagta   840
  aacagcactt tggaaggccg aggtgggtgg atcacgaggt caggatttca agaccatcct   900
  ggctaacacg gtgaaacccc gtctctacta aaaatacaaa aaaattagcc aggcgtggtg   960
  gcagcgcct gtagtcccag ctactcggga ggctgaggca ggagaatggc ctgaacccgg   1020
  gaggtggagc ttgcagtgag ccgagatcgc gccattgcac tccagtttgg gcgacagagc   1080
  aagactctgc ctcaaaaaaa aaaaaaaaa aaaaaaa                              1118
```

<210> 224
<211> 1485
<212> DNA
<213> Homo sapiens

<400> 224

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  ggcacgagct taaattgctg tactagtagg acaagcaagg ctgcgcacaa caaagttaat    60
  gggatataat ccaaataaaa ttatagttcc attagacaaa caacaaattc agcaggctta   120
  tattaattcc caggaatggc aaattaatat ggcaggtttt actggtgttc ttgataatca   180
  ttatcctaaa tccaaaatat tccaatttct taaattgaca tcatggatat tgctttccat   240
  tactcaaaaa acccctattg aaagggccat tactgttttt actgatggat ctagtaatgg   300
  aaaggcctca tttgtgggac ctcaacaagt ttttcaaact gactttgctt ctgctcaaag   360
  ggctgaactt atggctgtga taacagtgtt aaaaacttt aaatagccag taaacattgt    420
  ttctggttca gcctatgtag tgcaagccac acaaaatatt gaacatgcct taattcaaaa   480
  tgtgactaaa gaccaactta atgttttatt tcattctcta cagcaagcag tacaacaaag   540
  gcattccct ttctatgcac tcatatgaga gcacatacta acttccctgg ccctttaact   600
  aaatttaatc aaagggcgga taattatatg gggaagagga ttttcttgtg tctctccagg   660
  taacaatcag gcacctgtgt gggtgcccac caaacatctg gagatctatc atgagccaca   720
  ccaggaagag agggctctgg gaagagccag agctcctgat atgagtgatg gtacaaatga   780
  acatctcaga gacaaaggag aagaccaatg gagtctgtag atgcggaagc cacctctgga   840
  gagaaagcca ccactgagag caagcaatga tagctgtggc ggttttgcaa aaaagaaaag   900
  ggagacaagc gcccagctat agttaccaat aaagcatggt actggtatta aaataggcat   960
  gtgttctgtt ccaatggaac agaatagaga acccagaaac aaagccaaat atttacagcc   1020
  aactgatctc tgacaaagca aacaaaaaca taagtggggg aaaggacacc ctattccaca   1080
  aatagtgcag ggataattgg caagccacat gtagaaaaat gaagctggat cctcgtctct   1140
  cactttatac aaaaatcaac tcaaatgggg tcaaagtctt aactctaaga cctgaaacca   1200
  taacaattct agaaaataac attggaaaaa ctcttctaga cattggttta ggcaaaaagt   1260
  tcatgaccaa gaacccaaaa gcaaatgcaa taaaaaggaa gataaataga tgggacctaa   1320
  ttaagctgaa aagcttctgc atagcaaaag aaataatcag cagagcaaac agacaaccca   1380
```

134

```
caggggtggga gaaaatattt gcaagctatg tatctgacaa tggactaata tccagaatct    1440
acaaggaatt caaacaatta gcaagaaaaa aaaaaaaaaa aaaaa                      1485
```

<210> 225
<211> 1249
<212> DNA
<213> Homo sapiens

<400> 225
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tgctggtaag gcgctctccc ccacaaccca ccaacatttt aacaaatatc tctgaatgac     60
aggattacac atgactttac tcatttcctt catatatgtc agtactttt agttttttca      120
gtgactatat ctttcatact cagacatttt taataaaaat gagaagtagg atgctgagtt     180
atctacatag gatgaaggta gtagtcaaat gtgaaaacag tttgtgcaag agtctcctcc     240
cttgactaac atcagctggg gacagtgtgg ggacagtgtc ttcttcagtg atgtcctcag     300
gcctgggaga accacttcac agagtggact ttgatacgtg tttgtggcat taataattag     360
ggaaagatat atgatgaaaa gaaaaaagca attttggagg agacagctgt ttggttttca     420
aatgattgct attgaagatt cgctctactt gaataaagtg aaaaggatag tggtgtagaa     480
ctaaaaggct tgactggaca caggcaggat ttaataaaac tctcattttt aaccccagta     540
atcttttacc agaaagaata ttacaggggt cgggaagtgg ctgtctccat gaaaaacaaa     600
tctggcagat gttttttaac caagaaagtc agtcctctgt gggaatccta aatactggtc     660
ttcggtcact tgctagaaat acacataaaa gcaagtgtgg gatgtggggc agctccattt     720
tctctgtgtt taacaagcct gtttctttca aggagaaata ttaatggatt tctctggtgc     780
ccaaacctac ttgtggaagg aggagcctga ccttactgtc tccccgttct acataatctg     840
ggtgttcagc caactggcac agatgggcca gacgccaggc tcagcaacgt gccctgtacg     900
cagctttcta cctccctgaa agcaatcacc tataaatgtc tggtgcgaag actacaaaag     960
ttgaactagt tagtaaaatg ctaagctgct tccaacaaga cattcatctc agctattgct    1020
ttgatgggtg aatttaaaac tctgctaaag gaatctttcc aggaattcca tctctaaagc    1080
agcacactcc gggaccttag tggtggagaa tccacaccca tattttccc ccaaaaatca     1140
cttgtctagt tgccatgtct cctcaggact atattgtatc actctgatgt ttctagaata    1200
ttttgtgctg agtgacttgc ttagaaaaaa aaaaaaaaaa aaactcgag              1249
```

<210> 226
<211> 2082
<212> DNA
<213> Homo sapiens

<400> 226
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ggcacgagat tcccagggtc ctgtttgaga atgtggaggc ttttgccatg ggttttattg     60
ggctgatggt tgccatgatt ttcattatgt tgtttggttc ctgggatcat aaaaatgttt     120
gcctcttcct agagtaccta ggatcattga aaagaaaagg gataaaaaag cccctgcatt     180
tgtagctgct acatagcata caaaccatgg cttccttgag ggaaaagggc cagctctggc     240
tctgggctag ggaaaatcat caaactggaa gggacaggac aagcagccac acccagtctc     300
cacctccctc ccatccaagg acactgaggc ccagagagat gctcatctaa agctggtctg     360
gaatcctggt cccactctcg gtcaggtgct ctttctctcc ctggtgactt gaggctgtga     420
gtagagttgg gaaaggtaaa ggagtctgaa ttctgctgaa ctagtgcttt gggacacctc     480
taggagtgga agaaatggtc agatttacag gcagcatagc tcaggacctt gtccaatcag     540
ctgtcttgaa cacccacttt ggtccacggt tcacgttcat gttatagtca tgagccctg      600
ctcctccgcc agtctagact caaggaagca gtggcacaaa tctcctggct gttgggttcc     660
atggagcaga gagcctgaac ccacccggaa accaagtcta gacaaaacag agctttgagg     720
tttacaccca caacctttgt accgtcggaa gcagagggtg ccaggggatc cactacacgc     780
tccctgggaa gcagaggcca gaggtgtcgc atttagaaga tgcgtcagga gaaatacacc     840
cacctaagtt agttctcaaa aaaattaata gtaagagaag tctgaaacag ccactggagc     900
aaaatcaaac aatttcacct ttatccacat atgaagagag caaagtttca aagtatgctt     960
ttgaacttgt ggataaacag gctttactgg actcagaagg caatgctgac attgatcagg    1020
ttgataattt gcaggagggg cccagtaaac ctgtgcatag tagtactaat tatgatgatg    1080
ccatgcagtt tttgaagaag aagcggtatc ttcaagcagc aagtaccacc agcagggaat    1140
atgcgctgaa tgtgggtacc atagcttctc agccttctgt aacacaagca gctgtggcaa    1200
gtgtcattga tgaaagtacc acggcatcca tattagagtc acaggcactg aatgtggaga    1260
ttaagagtaa tcatgacaaa aatgttattc cagatgaggt actgcagact ctgttggatc    1320
attattccca caaagctaat ggacagcatg agatatcctt cagtgttgca gatactgaag    1380
tgacttctag catatcaata aattcttcag aagtaccaga ggtcacccca tcagagaatg    1440
```

135

```
ttggatcaag ctcccaagca tcctcatcag ataaagccaa catgttgcag gaatactcca   1500
agtttctgca gcaggctttg gacagaacta gccaaaatga tgcctatttg aatagcccga   1560
gccttaactt tgtgactgat aaccagaccc tcccaaatca gccagcattc tcttccatag   1620
acaagcaggt ctatgccacc atgcccatca atagctttcg atcaggaatg aattctccac   1680
taagaacaac tccagataag tcccactttg gactaatagt tggtgattca cagcactcat   1740
ttccctttc aggtgatgag acaaaccatg cttctgccac atcaacacag gactttctgg   1800
atcaagtgac ttctcagaag aaagctgagg cccagcctgt ccaccaagct taccaaatga   1860
gctcctttga acagcccttc cgtgctccct atcatggatc aagagctgga atagctactc   1920
aatttagcac tgccaatgga caggtgaacc ttcggggacc agggacaagt gctgaatttt   1980
cagaatttcc cttggtgaat gtaaatgata atagagctgg gatgacatct tcacctgatg   2040
ccacaactgg ccagactttt ggctaaaaaa aaaaaaaaaa aa                       2082

<210>  227
<211>  2294
<212>  DNA
<213>  Homo sapiens

<220>
<221>  SITE
<222>  (2287)
<223>  n equals a,t,g, or c

<400>  227
ctgcactcag ccctgatcta ctttctggga acctttctgc tatccatatt gatcgcctgg     60
actgtgcagt atttccagtc tgtctcagca agcgatcccc ctccaagacc atccttgcc    120
ttagagctga tgaagaaagc agcttccaag ggattgcatc aggcagtcaa tggcctggga   180
tggtattacc acaaattcaa gaaaaattac gccaaagcag caaagtactg gttaaaagca   240
gaagaaatgg ggaacccaga tgcgtcatac aatcttggag tcctgcattt ggatggcatc   300
ttccctggag ttcctggaag gaatcaaact ttagctggtg aatatttcca taaggctgcg   360
caaggtggac acatggaagg gaccttgtgg tgttctctct actatatcac aggcaacctg   420
gagacattcc ctagagatcc tgagaaagct gttgtatggg caaaacatgt agctgagaaa   480
aatggctact ggggccatgt catccgcaaa ggcctcaatg cctacctgga aggttcatgg   540
catgaagctt tgctgtatta tgtttagca gcagaaactg gaattgaagt gtcacagaca   600
aatttagcac acatctgtga ggagaggcca gacctggcca ggagatactt gggtgttaac   660
tgtgtttgga gatactataa tttctctgtt tttcaaatcg atgctccttc ctttgcatat   720
ttgaagatgg gagaccttta ctactatggc caccaaaacc agtcacaaga cctggagttg   780
tctgtgcaga tgtacgccca agccgccctg gatggagact cccagggatt ttttaacctg   840
gccctgctaa tcgaggaagg tacgataatc ccacaccata tcttggattt cttggaaatt   900
gactcaactc tccattctaa taacatctcc attctccagg aactgtacga aaggtgctgg   960
agccacagta acgaggagtc cttcagcccc tgctccttgg cctggcttta cctgcacttg  1020
cggcttctct ggggtgctat cctgcactca gccctgatct actttctggg aacctttctg  1080
ctatccatat tgatcgcctg gactgtgcag tatttccagt ctgtctcagc aagcgatccc  1140
cctccaagac catcccaggc ctccccagac actgccacgt ccactgcaag tccagctgtg  1200
actccagctg cagatgcctc tgaccaagac cagcccacag taactaataa cccggagcca  1260
cgtgggtgaa ctgtgcactc cagttctctc cagatgagag agaatctttt caacagctgg  1320
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gatgcaaatt ttgcaattgg tgtcattttt tttaaagtca aattacaagg aagtacccag  1440
atcaggcagt ggtaatacca aaggtcatca aacacataca aggaacatct tgatcatagg  1500
gcatgtgggg aagtttactg ggccatcaca gactttgtt ctagtgattg tatgtattag  1560
gagtcatagc atgccctacg gcagatctgg attcttatac actaagatgt gtcttaagaa  1620
tcacagtgcg tgcttcatcc ctttattgaa gaacagaaaa ttatgactac tctacaaggt  1680
ggataatatt ttggtacctg tgcttgccac agccctgttc ctcaaagctg aattgataga  1740
tttctctttg acttccaaga cctagcagtt ataaggcacc ttgaaataaa ttgtttgtgc  1800
ctggaaatgc agggagggca atagctttgt aaattggttt acatttttct ccttgaattt  1860
ttctagggtc ctagtgcttc cgaatcattt aatggcattg tcggatatct tttacatttc  1920
aattgcaatc catgaaatta catttagaag attcttagta cttaactgta gtcttctcca  1980
tgaattacac gttagaatag actggcagca actgaatatg cagcaagtaa gcctctagct  2040
tatagtttca tccctacccc tcatgcctgc gtgagtctgt acagggatat gtgtgtgtgt  2100
gtgtgtgtgt gtgtgttaga gaggaagagg aagagcagaa tgtctgtata ctacatgctg  2160
ctaaggtagt gaataaatca gtaatgcaat attgtgggtc caaactactc tttgcactac  2220
tttatttaca gtagtaaata aaattatttt tatacaattg aaaaaaaaaa aaaaactcga  2280
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136

ggggggnccc gaaa   2294

<210> 228
<211> 1255
<212> DNA
<213> Homo sapiens

<400> 228
gaattcggca cgagacttgc cagactcaca tccgtgcagt ttaaccactt cgttttccag   60
aaaatcacat tctgaattcc gtgaaatcag gcttgcaaca agggctgtgt ctgtctgata   120
atatgtgtat ctgtgtatcc tatggaaatg cattttaaa ctaagaagtg aaccattcca   180
ccagaacctt tgattctgca caagatttcc ttgctctggg aacaacccc aaatgccctt   240
gggaggaaca acatgagctc aggaagcctc tctttcttca cttaccatta ctaactctcc   300
aagcatagaa atccctggga attgcgagaa taactcccac tattttaaaa tttatattca   360
gatttgtttc gtttcataag acacatcaaa caggcctata caaaaggttt aggaaaagaa   420
aacaatggtg agtcccggcc ctcttcgaat tcactggcac ctcatgcaag tgtaggaagg   480
cacgctggat cgtctatctg attccaaagc tgtccttgc catctcatcc cttggcctgc   540
cccccaaccc tgaggatgcc cctgccatcc ccccaacctc ctcatattgc ctctgaaccc   600
agatggcaat ccatcccggt tctctctgag ggccacgggc ttgggtagtg gaaagggtgt   660
ttgggaaatt gttaaatcag ttacccgtag tagagctatt tcttgtactt ctaagttttc   720
tagaagtgga aggattgtag tcatcctgaa aatgggttta cttcaaaatc cctcagcctt   780
gttcttcacg actgtctata ctgagagtgt catgtttcca caaagggctg cacctgagc   840
ctggattttc actcatccct gagaagccct ttccagtagg gtgggcaatt cccaacttcc   900
ttgccacaag cttcccaggc tttctcccct ggaaaactcc agcttgagtc ccagatacac   960
tcatgggctg ccctgggcag ccagcattca ttgtaagttc cctctttgaa aactggtgtg   1020
tgggtgttca gttctgtgtc tggtgggtat ggacagacag taatctcctg tgatctgtgc   1080
tagctgtgag gcagctctgg aacgtgaaga gctgtttggt ttgaaccgtg aacaaaactg   1140
tgttttgagt ttagctgaca ttaaagaaaa aagttcatca cgtgactgtt aatgtaaacc   1200
tggttattaa aataactatg aaattacaaa aaaaaaaaa aaaaaaaac tcgag   1255

<210> 229
<211> 895
<212> DNA
<213> Homo sapiens

<400> 229
ggcacgagca gctctgcctg tagcaggagc cctgaggagg aggaggaaga ggatgtgctg   60
aaatacgtcc gggagatctt tttcagctag ggcataaact gtgcactgaa ctgtctgccg   120
agagcagctg gaggacagct gagcttccac tggtgctgct gggccgcccg cctgtgggaa   180
tggggctctc tgtgctccta cctttgtgcc ttcttgggcc tggcagattc acctcaggcc   240
agaagcccct ggacactccg ggccttgggg ctgccgttct gagtgtgcgg aaggcaggac   300
tcaaaatgag atcccatttg actccctctg tatgtactgt gccctctcct ggctcttgag   360
gctctggagt cccaattgtc tgtgttagtc agtgaccagg ttccagggaa aatgatgtca   420
tgtggtggtc caacttactg gaaccaaaga gacagtactt tgcaaagaaa aggatcactg   480
ccaggtgcac tggaattgct acagtttagt ccgcatgatc tctcctgaag gaggaagcct   540
gtttcaaaaa tagtttccat catgagtcta tcaatgagct cccacctctc cagccagcct   600
agaaagcaaa cgagctgccc acagttctct gccctgtctg ggaggttgag gccacagtgt   660
atagactggt aagccagaca ggcctcctcc cgcaagctgc taccttgctt tcacctgtac   720
cttggtcccc gggcagctag ctataaagca agagggacag gagcccagaa gagacactga   780
ggacaagaga tcacaccaga gtacatgtct ctgcctctgt tttcagtgtg gctttggaca   840
ggaatatatg aataaatcac tgccatacag gttttccaat aaaaaaaaaa aaaaa   895

<210> 230
<211> 1208
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1164)
<223> n equals a,t,g, or c

137

<220>
<221> SITE
<222> (1166)
<223> n equals a,t,g, or c

<400> 230

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gaattcggca cgagaagtta tataccttga aagtccctgc catgacactt attagaccag      60
atttttgat atgttgttaa gtcatcctga ccctgtttat gtacaaactc aatctttgtg     120
tggttgatgg tctacatgag atatgtcaag tgtttgtcaa tggatttggt ccatagtaaa     180
tgttcactaa gaggaagagg cagtatttag gaacatatat tctatgttaa acagcctagg     240
ttgaaatgtt gacttctctt atttgctatg cgatcccgtg caagttcctg aattttgctg     300
tgccttggtt ttgtkatata actcctggaa gtgtgacgat ggccacatga gttcatacat     360
gaaaacctct tagaaaatgc ytgggrcaca ttaaaaactc agtaactgtt agctactatt     420
accttcaaaa tataaccaag tgacaaaagg ggagtacaac taatcctcag raaatcagat     480
taatattctg gctttgcgac ctgtacaaag tacttaattt cccagtttag tgcctttgtc     540
tgtgaaatga tacgtaactt ttatggcwat tatgatgata aagtaagaaa tgcatgccaa     600
gtgcctaaca taaaatcaat gctaagaaat ggtagctatt attagtaata atgataaaga     660
atktygcaaa aatttccctt tgaatcctag gcgttggtca tattgaatta cttgtagttt     720
ctcaaacatg ttctcttgtt twcatgtgta cctgctgtct tgctttgcta ctccactgta     780
ttcttcactt gattgcctcc tactagttct tcaagatgca ggtgtttcct tccctggaaa     840
acatttccta aagtcagggg acgtgttttc tgtttkcctc tattattgta cttcttatac     900
tctctaattt tctattgacc tattttcttc caatataaga cactttcttc ttgtgtgatt     960
ttcagataag ctactaaagt cttggtttcc tcatctgtga aacagggatg taaaaattaa    1020
atgagatgca cttggcactt aggccaatgt ctagcacctt ccccaatccc aagaacataa    1080
taggcagtca acaggtgttt acttatgaaa tgaaaataat gatttacaaa ttttattcaa    1140
tctaaaaaaa aaaaaaaaaa ctcnangggg ggcccggtac caattccccc tatagtgaat    1200
cgtattaa                                                             1208
```

<210> 231
<211> 1165
<212> DNA
<213> Homo sapiens

<400> 231

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gaattcggca cgagaagtta tataccttga aagtccctgc catgacactt attagaccag      60
atttttgat atgttgttaa gtcatcctga ccctgtttat gtacaaactc aatctttgtg     120
tggttgatgg tctacatgag atatgtcaag tgtttgtcaa tggatttggt ccatagtaaa     180
tgttcactaa gaggaagagg cagtatttag gaacatatat tctatgttaa acagcctagg     240
ttgaaatgtt gacttctctt atttgctatg cgatcccgtg caagttcctg aattttgctg     300
tgccttggtt ttgtkatata actcctggaa gtgtgacgat ggccacatga gttcatacat     360
gaaaacctct tagaaaatgc ytgggrcaca ttaaaaactc agtaactgtt agctactatt     420
accttcaaaa tataaccaag tgacaaaagg ggagtacaac taatcctcag raaatcagat     480
taatattctg gctttgcgac ctgtacaaag tacttaattt cccagtttag tgcctttgtc     540
tgtgaaatga tacgtaactt ttatggcwat tatgatgata aagtaagaaa tgcatgccaa     600
gtgcctaaca taaaatcaat gctaagamat ggtagctatt atkagtaata aygataaaga     660
atktygcaaa aatttccctt tgaatcctag gcgttggtca tattgaatta cttgtagttt     720
ctcaaacatg ttctcttgtt twcatgtgta cctgctgtct tgctttgcta ctccactgta     780
ttcttcactt gattgcctcc tactagttct tcaagatgca ggtgtttcct tccctggaaa     840
acatttccta aagtcagggg acgtgttttc tgtttkcctc tattattgta cttcttatac     900
tctctaattt tctattgacc tattttcttc caatataaga cactttcttc ttgtgtgatt     960
ttcagataag ctactaaagt cttggtttcc tcatctgtga aacagggatg taaaaattaa    1020
atgagatgca cttggcactt aggccaatgt ctagcacctt ccccaatccc aagaacataa    1080
taggcagtca acaggtgttt acttatgaaa tgaaaataat gatttacaaa ttttattcaa    1140
tctaaaaaaa aaaaaaaaaa ctcga                                          1165
```

<210> 232
<211> 1021
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (977)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (998)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1001)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1015)
<223> n equals a,t,g, or c

<400> 232

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ggcacgagaa acaagctcat tgttaattca tgcagtttta atttatgcat aggagaatta    60
tgcaggataa ttacctgcag ttgaaggaaa atgaatagcg tcagatgtgg ttaattcacg   120
catggtttac ccttctatct ctctatcaga aaagatttaa agtggtaacc aatctgaatg   180
atatgcaaaa ttgcattggt ttgctaagta gaagtatttt ttttatttgc atcacaaata   240
gagttctcag atttggactg actagatttg aatataattt ccagaacaat agctgtgatt   300
cactgactta actcatatgt tatctcttcc agaagtgccc atttttcaaa tcagtgcaaa   360
agaagctatc ttcatgggcc ccatgttagc ctgagtatag tttcctttat gaggataatt   420
caatgagaat gataattatt tcctatatca agatttgtgg gagatttacg gtaatgatca   480
cactacttgt tcccacattg tccctgaacc ttcatgatcc agtggcttcc aaaaactgaa   540
acaaacagct ggaacaaatt atggggcaat gaatggacat cagtggaaat ttccttgtga   600
cttttgtcaa gcaatagata gctgctaagg cctctttgaa ctcacaccta gtaattgaga   660
gaaggctaag aggtggttca agtttactga aaaaaaaaaa aaaaaaactc gagggggggc   720
ccggtaccca attcgcccta tagtgagtcg tattacaatt cactggccgt cgttttacaa   780
cgtcgtgact gggaaaaccc tggcgttacc caacttaatc gccttgcagc acatcccct    840
ttcgccagct ggcgtaatag cgaagaggcc cgcaccgatc gcccttccca acagttgcgc   900
acctgaatgg gcgaatggca aattgtaagc gttaatattt tgttaaaatt cgcgttaaaa   960
ttttttgttaa atccagnctc atttttaaa ccaattangg nccgaaattc gggcnaaaaa  1020
t                                                                 1021
```

<210> 233
<211> 1661
<212> DNA
<213> Homo sapiens

<400> 233

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aaagatcttc cagtgtaaag cataggaat gaaacaagcc atgagaaagc agaatatttt    60
gagtatattc tcatgccttt cttttaaagga gaagcgccta tctaaacagt tacagaaacc   120
caaattcaaa gtagattaaa caagaagtaa atttgtaaac tcttttaact gggagacagg   180
aagtagggag ggctccaggc acaatatcat tagcagttca atgtgaacga agacccatgt   240
cctttccaag cctccctctg ccatcagcat tgccctcctt cccagggtca cagatggcta   300
tcaatggcaa aactgggggtt ccgcgttctc ttctcctcat ctggcaagag aaaatgggaa   360
atctctatcc caagcttgga ttaaaaatta ttttcatttt tgtgttccag caaacttggg   420
tcctatgccc agccatggac caaaaatagg cttaatgtga atgttatgtg ctgattggat   480
taaaataagt tctgactctg aatctgggaa tgtggtcacc ttcctcagag acaagttgag   540
aggttggctt atctgaataa aagcagagaa tatgagatgc tggagaggtg ttcattaagg   600
agaacattcc ctgaggtgaa ttaacggtta gaattatcta tctctgtatt tatctatcca   660
cccatctatc atcatcatca cctcatctcc ctcctttctc tctctctaaa tatatacatg   720
cgggtatgtt gagtgtgtat atatttattt ttttgtgtgt ttatatggtg tgtgtgtgtg   780
tgtattccag gcagatgtgt gcatatatac ccaaactttc ctgatgacct tgaaattaaa   840
tgggtcatgt gaagctaaag attatagaac cccttgattc ctttataaac agtatttcta   900
```

```
agataagatc aacactaatc tttcaaatta gttgactgtg tatagaacaa cttgtttatt    960
taaagtcatc tagtctaatg caatcaagga gtaaattata aataaccagt tagcataaat   1020
ggaaagaaaa tagttccttt tctttgaatt catttcatgt ttaatttttc ttgcgcacat   1080
atagaaatga atagaaatat tcccatttca atgtgcaaat tcagccacta tatagtttgt   1140
ttctttttgg tagctaataa taataaattt ttaagtaaga tctgattttg aaatatgaaa   1200
agaagtttat cctttcctgt tttaatacca cctgataccc gtttaactta ctgtgtttga   1260
ttcttgggga catttatgtt caaggttctg tcaaagcaat ctattattct tgttttttacc  1320
tgatggatca tggagaaaaa taatggattc agttatgaga aacagtaata gatttttttta  1380
actgccataa atttctctcc ctgtattaaa taaaaggatc aggaaaagat aagttgaatt   1440
ttcctacaat gagccagctc ttcttaaatt tacctcccat aaattgtagc aaagcacttt   1500
tcatataatg tttttatttat gtaattcagt tatttggaga tggtggtgag ggatgtgagt   1560
acatcatttc atgttgtatt tcaaatctct tttgacagaa accctaagaa tttgcaataa   1620
agaaaattca atgttcaaaa aaaaaaaaaa aaaaactcga g                        1661
```

<210> 234
<211> 477
<212> DNA
<213> Homo sapiens

<400> 234
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ggcacgagga gaagtgacac agagtaaatg gctgatcttc tatattgtag tatattttgt     60
ccttccctct tccctgagga acaaagcacg tatctttagt ctctttgata tttattctga    120
gaccaagggc ttgcttgacc tgatgatttt ccttcagctc tctgaaggtg ctttttccac    180
aatccaagtg attctgatac acactaaagt tgagaatcac tgcactagat cactttgtgt    240
tttctgattt tcaaggttga tacatagctt taatacagct cttctgttga cagttattac    300
tttaattttg catttgttcc ttgtaagaat ggctggaaac tgtgtgttga catttgagga    360
tgggtatgca aggaaaaaat atacttctgt ttacttactc tgactttgaa atagtgttat    420
ttttctatat ctgaaataaa tgcttctacc atagaaaaaa aaaaaaaaaa aaaaaaa       477
```

<210> 235
<211> 779
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (766)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (767)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (773)
<223> n equals a,t,g, or c

<400> 235
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ggcagagggt aaatctgatg tcctcccaaa gtgctgggat tacaggcgtg agcaccgcgc     60
ccagccacca cataatgttt tataatctaa gacctctgca tcttacgtaa atttaagtga    120
aagtagtagg ttataaaaat aggaccttca ccaaccatca tttgatatca agtatatcaa    180
atgctttcag tagcaactaa cagaatatac aattcaaact gatttttaca ataagggga     240
ttattcttaa tcacctgagc tttaagcatc agtagatctg gtagctcaaa ttttttgaac    300
tatgtttttt ggattaaatg cttcaaatag cattttctcc cccaaaccac ctgctccttc    360
taattgatgg atttctcaca tgagtcacag gcttgaaaca tcatgagcat cttttaacagt   420
cccttttgcat gcccccaacg tctgtcagtt gccagatcat ctgcattttg tccccatgct    480
atctccttct ctttctttct tcctgtttcc aagaccacca cctaatcaag tcaaactggt    540
gcagtaactt atcaactagt tccctcccct tccagctttt cttgctaatt aatcttttca    600
aagcgtacat tgcagctggg catggtagct catgcctgta attccagcac tttgggaggc    660
```

```
caggggcggga ggatagctta aggaaaggag ttcaacacca gccttgcaca acatagcaag    720
acccctgggt ctctgcaaaa aaaaaaaaaa aaaaaaaaaa aaaaannaaa aantccgag       779
```

<210> 236
<211> 972
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> n equals a,t,g, or c

<400> 236
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ggtacttcaa aaccccccgag gcctagatct gctatttctc tcccaaggag ggttatgcgc     60
antctaggag agagttgttg tttctatgcc aatcagtctg gggtcataaa ggatactctc    120
caaaaagttc gagaaaatct agatagacgc taacaggaat tggaaaataa caccccctggt   180
accaaaacat gtttaactgg aatctatggc taactactct aatcactgga ttggcgggac    240
cccttctcct cctcttgtta ggtttagtct tcgggccttg tatattaaat tggtttctta    300
aatttataaa gcagttcata gcttctgtca aacttacgta tcttaaaacc caatataact    360
cccttgttgt gactgaagaa tcaatgattt gattacccaa aacatgagtg gggaatgtga    420
tacctaccct gttttaacct gccccaagtt tacgtgtaca gtgggtcaga agggtgactt    480
ctgacccttc tgctcagagt gactctctct tagctgagat agctggacac tctccatttt    540
agcttcttca cttgcagtcc ccttatcccc ctcccttaag ggaataacta gtgcaagctg    600
actccaagca catccaggaa tgcacttact gataagatat tgaggcaagc tgtaccagca    660
gctcctgggg acgtgctcgg cggatggtac ccaagcccct gcatttatct ctttgtgata    720
gtttaagccc ctgcacctgg aactgtattt ttctgtaact atctctgtaa ccattaattt    780
ttttaacttt ttgcctgttc tgcttctgta aaaattgctt caagtaggct ccccctcccc    840
tatttagacc atggtttaaa aagaaatcta tcccgttctt cgaggccaag agaattttga    900
gctctagcca tctctcggtc gccggcaata aaaggactcc tgaattagcc tcaaaaaaaa    960
aaaaaaaaaa aa                                                        972
```

<210> 237
<211> 1885
<212> DNA
<213> Homo sapiens

<400> 237
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gaaagctgaa aggtgctgga agcctcctgc actttgggaa tatacagtca ggaacaattg     60
tcaggagttc tgtagttgat tctgtaggtt gggattgcca taaggttggt tagaaaaaag    120
atgtgcgaaa gctttcctga gggttttttgc ccttgctttc acatgtccca taattgaaat   180
taagaactgc tggcaactgg ttagtgacca gtgttgaaat gggaaaatat tactggctta    240
tgcttttgct tatagatatt gaaatttaat aaaatttaac catagttaca tatgattcta    300
tgaaattagg taggctcttc aagaaaaatg tgagcaatgt aaggcagggt attttttggga   360
ggggggtgct ttattgtata ggcaagctct cgaacagtgt ctgataatta gtagtgtctg    420
acaatatttg ctgaatgagt gaactcatgg taacataact ccagtatggc agattgattc    480
ttggtgcttt tttccagtgg caaactttta tagaaattgg agagtttcgt aaagactttt    540
aaaaagttgt cagaattacc tattatgtcc tttcctagat aatcmatttg gaaacaattg    600
ctggtacctt aagcccgatg tatgcctcct attatagtgt tgaaaatgtt cytttgacaa    660
atgcatcaat gaccaggcmc atgagamcag tgcacagctg tagaaaamca mcaatgaagg    720
tcttcgacac aggagagagt ctgcactgca tcacagctga tccgaaagtt aaattcaatg    780
aaaaggcaaa tattttggtc aggagaggaa ttcttcctag ggagtattag cacagtgtat    840
ttttagytgt gtggctattt atagctgccc aatggcttgc gtctgagtct ttatttggtt    900
tttaggacat gctaaggatt gagggtcgtg ggccttaatt gtatagaaga cgcagttgcg    960
tttggttgcc tggaggcttc tctgtgaagc ctggtgggac acctgctggc cagtttggcc   1020
cttcttagtg aaggtgatag agacaagggc agaaggtcat tgtatttata ggatatttga   1080
agcttatctk gtttacttkg ttaataatac tkgagtcatt tttctaaaca ttccttkgcat  1140
aacrgcaarg attaaaarga taagtaatgt aatatattag sccctagttg tcattcacct   1200
gttcttgtag agctgatact ttttttcttga tcaaatttta ggtttaatca tatttagctt  1260
agaagagtgg tctgtcttaa ragtatwctg attatttagg aacatctrga tgaaacttct   1320
ttgccttagt ccatcgtttc ycctttaaat tcctaaaggc aggaatgagt gtttcttaaa   1380
```

```
accaacatgt ataaagcaac wttttaggca aactgggatg aggaaaaaca tcttgaaggg   1440
ggcttcataa tggtgttgga gcctgttaaa aatgtggaat ggaaagccga tcatgaaaac   1500
agatagtact gactttggc aaaatgagtc tttatgaaaa cataccttaa tgattatctg    1560
acaaatgcaa gtgctttttg aggttaacag aattataaac aggagactgc agacactaag   1620
gtcactactg agcagcacga taattcgtgt ggtgtgttct ttttaaagat taacaatctt    1680
aagtcttttg tatgttatgt tgctaagtta tttgggggaa agtgttaaaa taagtgctct     1740
tactttcttt ctccactgct tttgcacaaa aactttactg ttcaaagaat attgtccatt     1800
cagtttactt tttattttta agatgaagta tcccccaaac tggtcatgcc aggaaaaaaa   1860
aaaaaaaaaa aaaaaaaaac tcgag                                          1885
```

<210> 238
<211> 1251
<212> DNA
<213> Homo sapiens

<400> 238
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ggcacgagag aagaagtact actccaaaaa ctttggtaaa gtgcttattc ttccctagca    60
gtaggctgtt gctgagttgt agactggtgg ttttatgaaa aaaaaacagg ttggggaggt   120
gtgaagatgg aaatgagggc tgtgttatgt atatctggta tctacttctg ttccaggtgc   180
ttaattcacc ctcatactga tgtttaaagt tagaggattc ttgtccattt gtcttgtctt     240
ctgttggcag gtcacatgca ggtaataggc tatgggaagg ggaagatgcc tagattactt    300
ctaggctggt ctccaagccc caagttcaag cctcctgagt agctgagact acaggcacac    360
accatcgttc tcaacttttc ttttttaaca taggctagct agctcccacc ttagccttct     420
agaccctcca ttataattct tattcaattg ccttggcctc ccaaagtgct ggaattacag     480
gtgtgagcca ctgcacccag ctattttttc tatatttta tgtagttcat tgagggtaat     540
aattttatcc tacaacaaac atgtaagtta ttgaagaata ttggagtttt atgataatgc    600
tgtcataaat ataaaggta gggtaagagg gatccaaata gagctcactt atattgtcac     660
tgataggcag tcacgctgtg ctgatagaat gtggcctgac acttgatgga gtgcagcata    720
tgtatacttg ggcaatttga gcagatatat acggtcccga gtttaaagaa gagaacaaac   780
accagtgcac agctatagta ttcctaatat aggatgcatt ttaaagaatt tcacattcta    840
caaatggaga gagatggcag gagaagcctt attttaagtc ctgcactaag gcaggttaac    900
ctcatgggtg taattacctg gacctttttg taaggacaaa atatttaatc attaaaaggc    960
cctctgtagg gtttgaaata tctatatttt atatatgaat gcttctttta ttaatattta  1020
tggtaagata ttttatactg ctgataaacg gacattaatg atatatagcc tattgtttga  1080
aaaaagcatt ttggattata gcccaaaact ggaaataacc aacagataaa taaatggtgg  1140
tatattcata caataaaata ctactcagat aaaaaagatg aacttaatct cataaacatt  1200
atgggcaaca tagtgagaac ccatctcttt taaaaaaaaa aaaaaaaaa a            1251
```

<210> 239
<211> 1252
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (243)
<223> n equals a,t,g, or c

<400> 239
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gagaagaagt actactccaa aaactttggt aaagtgctta ttcttcccta gcagtaggct     60
gttgctgagt tgtagactgg tggttttatg aaaaaaaaac aggttggggga ggtgtgaaga   120
tggaaatgag ggctgtgtta tgtatatctg gtatctactt ctgttccagg tgcttaattc    180
accctcatac tgatgtttaa agttagagga ttcttgtcca tttgtcttgt cttctgttgg     240
canggtcaca tgcaggtaat aggctatggg aaggggaaga tgcctagatt acttctaggc    300
tggtctccaa gccccaagtt caagcctcct gagtagctga gactacaggc acacaccatc    360
gttctcaact tttcttttttt aacataggct agctagctcc caccttagcc ttctagaccc   420
ctccattata attcttattc aattgccttg gcctcccaaa gtgctggaat tacaggtgtg     480
agccactgca cccagctatt ttttctatat ttttatgtag ttcattgagg gtaataattt    540
tatcctacaa caaacatgta agttattgaa gaatattgga gttttatgat aatgctgtca    600
taaatataaa aggtagggta gagggatcc aaatagagct cacttatatt gtcactgata    660
ggcagtcacg ctgtgctgat agaatgtggc ctgacacttg atggagtgca gcatatgtat   720
```

142

```
acttgggcaa tttgagcaga tatatacggt cccgagttta aagaagagaa caaacaccag      780
tgcacagcta tagtattcct aatataggat gcattttaaa gaatttcaca ttctacaaat      840
ggagagagat ggcaggagaa gccttatttt aagtcctgca ctaaggcagg ttaacctcat      900
gggtgtaatt acctggacct ttttgtaagg acaaaatatt taatcattaa aaggccctct      960
gtagggtttg aaatatctat attttatata tgaatgcttc ttttattaat atttatggta     1020
agatatttta tactgctgat aaacggacat taatgatata tagcctattg tttgaaaaaa     1080
gcattttgga ttatagccca aaactggaaa taaccaacag ataaataaat ggtggtatat     1140
tcatacaata aaatactact cagataaaaa agatgaactt aatctcataa acattatggg     1200
caacatagtg agaacccatc tcttttaaaa aaaaaaaaaa aaaaactcg aa              1252
```

<210> 240
<211> 1256
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (34)
<223> n equals a,t,g, or c

<400> 240
```
acgtttcctg tcctgtgggg tntccngcat gtgncaggat ttccttccca catccatgat       60
agatgtgtgt caaggggcct aattccggag atccactgca gaggagcaac atctaaagtc      120
ctttcacctg agacacagga cattatgaat cctccttggt gtcttggcag atggtgctag      180
tggcataaac aaaaccaaat ggcctacagc tatacttaca atgagaatta wtcatattty      240
attcggtagc tgggactatg atgggcaagc atgccactca agcaagtgca tgccctctta      300
atacagccct cctcagtctt ggattcacaa tcttttacat ggatttctaa gttttcataa      360
aggttctttt gtcagggcat aactgctgta ttttcataac tagaagttgt gggtagagaa      420
cctcctattc tgccatcttg ctatgtcact ccccttgtat gtttcacttt ctgatatgtt      480
ctatgccaaa ttatctgatt tcaaattcaa aatttctgaa ataaaatgcc caagtttaca      540
cattgtgtaa taagtacatg tattgacatg gctcattttc attagagcat ttattaatat      600
tgagatgcat tttcttttac tgctttacat ttcatgccaa agattcaaaa tcctggctct      660
tcaataagaa catagtcaca gttaaaaact gtagttattt aaaggattgt ttttatggta      720
catctgtata tatttaatat tttgtgggtt agaatttat tgtattcaac tccattttac      780
tgggcaatct tttttcatgt agatactcct tgattattta atttttttca cttctaatct      840
tcatatttgg taattttcaa atctatacct ttaatgatca agtggtgttt aattcaaata      900
aaaataattg ggtttcactt gaggcaattt aaaatacatt tataaatcag acatttttat      960
tgcctataaa agttaggtgg tatttgcctg tataaatagt gcccctcctt tgattataaa     1020
ttatttattt tctttggtgg tcatcagtgt tttcttgtgt aggtgagtag tcaaaaaaca     1080
gtgtaaagtt accatctgtt tattgtctta ttacatatta ttctgtgaga caaacacttt     1140
tgcaatttgc aggtaatttc tgaggaatgt aaccttttta agtaggtgta aataatagtt     1200
ataaaaaaat aaaattgcct tcttaaacat taaaaaaaaa aaaaaaaaa ctcgag         1256
```

<210> 241
<211> 2858
<212> DNA
<213> Homo sapiens

<400> 241
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tcgacccacg cgtccggccc tcagccgctg cccacggggc cgcgctgctt agccactggg       60
accccacgct cagctccgac tgggacggcg agcgcacgcg ccgcagtgtc tactccggat      120
```

```
caagcgggat atcatgtcca tttataagga gcctcctcca ggaatgttcg ttgtacctga    180
tactgttgac atgactaaga ttcatgcatt gatcacaggc ccatttgaca ctccttatga    240
agggggtttc ttcctgttcg tgtttcggtg tccgcccgac tatcccatcc acccacctcg    300
ggtcaaactg atgacaacgg gcaataacac agtgaggttt aaccccaact tctaccgcaa    360
tgggaaagtc tgcttgagta ttctaggtac atggactgga cctgcctgga gcccagccca    420
gagcatctcc tcagtgctca tctctatcca gtccctgatg actgagaacc cctatcacaa    480
tgagcccggc tttgaacagg agagacatcc aggagacagc aaaaactata atgaatgtat    540
ccggcacgag accatcagag ttgcagtctg tgacatgatg gaaggaaagt gtccctgtcc    600
tgaaccccta cgagggtgtga tggagaagtc cttctggag tattacgact tctaygaggt    660
ggcctgcaaa gatcgcctgc accttcaagg ccaaactatg caggaccctt ttggagagaa    720
gcgggggccac tttgactacc agtccctctt gatgcgcctg ggactgatac gtcagaaagt    780
gctggagagg ctccataatg agaatgcaga aatggactct gatagcagtt catctgggac    840
agagacagac cttcatggga gcctgagggt ttagaccctg ctcccatctc cccttccccc    900
actcaagagt cccagcagaa tcccttcccc ccaccccagg gatggagagg cactgtgtat    960
ctccctccag actcgaagtc atcctgcaag atggcaagaa ccaagcaagc tccgatccca   1020
gggtgtggga gtgggggcct gttcccggtc tgacctcctt ggcactggag catctgggc    1080
ttcgttcatc cattcatccc gtatcagggg ccaaggtacc tttacaggag cacctagagc   1140
gagggccttt ggcaaaaaca aaacaaccaa cacacctctc cacagggcca gctccttagg   1200
gataagtgga agatggaaat tgcaattcca agagggagtg tgcccaaatg atttatgggg   1260
atacctggaa gggagcttgg ggtgggggct gtctgtgaca cttaagcagt ctgggtggtt   1320
gtctatttgt ctgtcttcag tcttgaagca gggcttccca atgccctttt cctccctgcc   1380
ttccttcccc cattatttcc cacaggccag cataattttg tttttcctaa tttatagtca   1440
ctgttctaga cagaccaaag agaaggaaca gtggtggagt ctaggctgct gatcagtaag   1500
ctttacctag cacctgagca cctttctccc ctccctctt tcctcaccct tttctagatg   1560
taagacagaa rgtaaatgtg actgggactt aaccaaggtc ttggtaaagc ctgcatggca   1620
ccgtaagaag ctgaaaatac tgtttgttcc cgcaatcact gatttgaaaa gttcccaaca   1680
caggcagctg ctgtgtatat gggattagag ccactacata gaatagtctc ttacagattt   1740
tcataaatac tagtcacaat aagggtattt ttcttggggg tggagtaagg gggagactga   1800
tgctagtcct tgttgtattt tgttgggctg tccttgtgta ttttcacccc agcctgtagt   1860
cctcctcact tcaacccag ggatttttgg ggagcaaggg tagccaatgg cagaggggt    1920
tggggctggg actctggagg ctcctcccct tctttctctt ccttccgcct cccccgtgcc   1980
cccagctgct cttgtcactg tctctgatgg gtatttgcct ggctttgttg cttctctatc   2040
tgtatttagc tgcagtgatc ctttagctgg ttggctcaga aaaaaaaaa tgtgctttag   2100
gtgccctgta atcctgggca tcaagggaat ccatccttcc ccttttttgat atgttctccc   2160
cgtacttcca gatttattgt tatggctccc agtgggtatt ggcgattctt gtgatgcagg   2220
gcctcagtca gtgtccagcc atgcataagg gagaggatag tgtgtacctg ccctgccctc   2280
tgctatgaag gtctctgcct tgtggatcat gggactcccc ttggaggatc tgtgcaaagg   2340
ggggctgggc acaaaggaga atgtcctatt tgggagggca ggaagcaaag gaactggaca   2400
gggattggtg ggcttgggga acggaagttt atcttggata cccttgaaga ggctgggtct   2460
cttcacatga agatcgaaaa gggaccctgc ttccaatttc cctcttccat tcctcgagct   2520
actccagggc ttagaagaat gctcttggtc tgtgggtcca gtgttgtctg tcatccattt   2580
aagtgttccc actttcaagt gacaatcctc tccttggccc tgccataggg cagagcatgt   2640
ctggcatagc agcctgactt ttatgcccta atcttgagtt gaggaaatat atgcacagga   2700
gtcaaagaga tgtctttata tctgactgta tataaatgaa gttttttgt tttttttgtt    2760
ttcctttttg gtgcaataaa gtttgttttg gcagaaaaaa aaaaaaaaaa aaaaaaaaa    2820
aaaaaaaaaa aaagggcgg ccgctcgcga tctagaac                           2858
```

<210> 242
<211> 1363
<212> DNA
<213> Homo sapiens

<400> 242
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ctgcaggatt cgggcacgag gtcaagtgag ggcagcagca ggtgaggtga gggatggagg    60
tgaggccaga tcacctggtg gtttaaaagc cgcagtgagg tgtttagacc taattttaaa   120
aacaatgaaa agcacttgat ttagtttagc catccatatg tggcttgtat tagctcaatt   180
agactcctgc cttttcgcaa ggacagcagt ctctctgtat cccatacaca agagaatgat   240
gtgttttctc tttttaaatg agatctgttt agctagttgt atggagaatg aattctgctg   300
gtcaattgtg gaaacagaga cttagttaag tagaccttcc tgagcttacc ccttgcagcc   360
ttccctgaga tggcaaacag gagggctgca ccaatcctat actgtcagca aaggtctgga   420
tcgctttgca aggattagaa agcctgcaca tgtggggcct cagaccatct gtccccatgt   480
```
```

144
```

```
ctacagaaaa gttccaactg ctgaatggtt ttgaaatgca tggttatttc ctgggcccaa    540
tccagtcctt cataatttgg ccaaaccttt atgcagaggg ctatgaggca tttttcctcc    600
agattctgag ggtcaaagca gtcccaatgg ttcaagatac actgcagagt agtataagct    660
gggggcagtw aagagaactg gttgtccatt ttgaaagaca gggaatagag gcatccctca    720
ttcagggtgt gatggggaaa gcaagcaagt gtccttcctt cactttccac ctgttgtccc    780
tgagccttgg tgaccttggc aggtactggc cataggtaac aatacccacg aagcagggaa    840
aacctggaga ataggaatta accaccctca gctgtgcctc cctttctccc tgctgccagc    900
aacctttgag ttccctgggc ctgtttatac cgtgaagcat ggcctccttc cgtggggtgg    960
ggttcagtca gcaggaattg gtcctgcgca tttacatttt gcctgttgct tggctttgag   1020
cccctcagac ctggtctgtc tttctagggc ctcagcctaa agcttggaat tgagtttgga   1080
actgaaaagg tattttagag gctgtttgta tctgtttaga gtgtctcaaa tgtgccctgc   1140
cgaatttgcg gttatcagcc agaaggggtt tttcctccgt taacttccct gtcagaaaca   1200
gctggtgggg ggtgggggag gcctctcact tagaaaaara aaaaaraaaa acagtttaag   1260
gggcaaaaag ggggaagttc tggggggaaga acccccttgtt agtgcaactg ggcatttcca   1320
atccttatat ctttcccctg ggtcagactg aattgaattc ctt                      1363
```

<210> 243
<211> 724
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (506)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (512)
<223> n equals a,t,g, or c

<400> 243
```
gtgaggatcc ttttttctag tgtgtactga aaacagctct tttaggaatt tttcatttcc     60
attggttttt gtcttgtgat atatgtcttt tcatgaggga taaattttat ttgcactcac    120
tgtttatgga gtatcgagta aaaactagaa caaagcagaa cgaaccttcc tatacaatgc    180
cttcccacaa aaacaaatac ctccctcaaa aaatttctgc tctgaacatg aaaatgctta    240
tctgcagctt gacattatta gtatgtctga gtcctagggt aggtaggaga tccaggtatt    300
atcattcaaa aggaactgaa agtgtgagca ctctttgaaa aagcactatt agcaatgtaa    360
atgccaagtt acatctgata ggcaaactct taagcctgtt tgtgtgatat ttaaggtgag    420
aaaatagttt tgcctattct ttatgacttt gaatagcctt aggactattt catctgttta    480
ttactctgyc ttcatactag atttcntttt tntcyttttt gacacggagt ttcgctcctg    540
tcacccaggc tggagtgcag tggcgtgatc acagcttact gtaacctcca cctcccagga    600
gaattgcttt aacctgggag gtggaggttg cagccagccg agattgcacc actgcacatg    660
agcccaggcg acagtgcaag actcagtctc aaaaaaaaaa aaaaaaaaa aaaaaaact    720
cgag                                                                  724
```

<210> 244
<211> 1099
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (900)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1060)
<223> n equals a,t,g, or c
```

<220>
<221> SITE
<222> (1062)
<223> n equals a,t,g, or c

<400> 244

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aagttctgga taaatacttg atttgatgtg atagtgtgta ttactctatc agaaatgcag      60
agcgttgtat gattttttctg tgtacacgcg ataagagcaa tattagttgc aaaaggaagt     120
tttcatcttt gaacattaaa ggtatccttt attgttgatc actatagcat gcaaaaaaga     180
aactatattt tctgtcctgt tctttgtatt actgttaaag agttggtaaa ctgccgtctt     240
gctgtgagac tgggaagtcg gcaatgaagt tagatttgta ttcatgaaca tgatctgcct     300
gtcatatagg cttgctttga cttgtttttt ttttcagtag tggcaaaggg ttttctgcca     360
ctcaatccac actttcctcc gcattggtat ctccgttgac cattttgcaa aatagtttat     420
tgagattagg ggtctgatct tttgtataac ctgttgtagt gaactgatca tatgcgactt     480
gactttggcc aatagtacct cgtcagtgta cagtactact atttagmctt actgatttgg     540
gtaatagaaa agctatgatg ttagaaatgt tgtcgttgta tattggagaa attttgaagt     600
tgcatattgg agtaatttag tcctgtatgc tttgtaaatg agtgcattct attgtcgaga     660
gtaaatacag tattttgtag tataaactta agcttttagc tgaagaaatt ggcagcatag     720
ttggagtgtg gagactawtc ttaaaacgca aatgtttaa attacaagga actgtagtgg     780
tgtgtaggct gtaacaattc ctggtgccaa atttgggaga ttatttggtt gagctacttt     840
ctataaagaa acatattaag tatctgcaat aaaagtggat ttgtagctat acacaagggn     900
ttttacatta taaataataa ctcaataagg cacctttctt tgctctttgt gtatctgcca     960
gttaagacca aaacatctca tattttcact ggagcttcct gccaaacaa atactggttt    1020
tgcattggct ttgctgctca gtttgaaagc taggggaatn tnttagagcc tactctggtt    1080
ctggaggctg cctgattaa                                                 1099
```

<210> 245
<211> 1703
<212> DNA
<213> Homo sapiens

<400> 245

```
agagaaagtt acgaggttcg tggccgcggt ttccccaggc agctggcgct ggaggcttcg      60
gcgtcacgtg ctggtctgga tttttctcga tgcactgggg aaagcggtgg actcttatcg     120
tgggagggct cttgatctgt gatttataga taggcacagc tactcccgtt cgggaaccca     180
acggcagaca ggtcctagtg cccatcagat acccgcggcc gggactcgga gctgtggggt     240
gtggggaggc ggaggcacca actaagagcg acctagcatc gcaaagccgc cctcggggcg     300
ctcatggcgg gacgctcctg ggaaaggctt tagccgcggt gtctctctct ctggccttgg     360
cctctgtgac tatcaggtcc tcgcgctgcc gcggcatcca ggcgttcaga aactcgtttt     420
catcttcttg gtttcatctt aataccaacg tcatgtctgg ttctaatggt tccaaagaaa     480
attctcacaa taaggctcgg acgtctcctt acccaggttc aaaagttgaa cgaagccagg     540
ttcctaatga gaaagtgggc tggcttgttg agtggcaaga ctataagcct gtggaataca     600
ctgcagtctc tgtcttggct ggacccaggt gggcagatcc tcagatcagt gaaagtaatt     660
tttctcccaa gtttaacgaa aaggatgggc atgttgagag aaagagcaag aatggcctgt     720
atgagattga aaatggaaga ccgagaaatc ctgcaggacg gactggactg gtgggccggg     780
ggcttttggg gcgatggggc ccaaatcacg ctgcagatcc cattataacc agatggaaaa     840
gggatagcag tggaaataaa atcatgcatc ctgtttctgg gaagcatatc ttacaatttg     900
ttgcaataaa aaggaaagac tgtggagaat gggcaatccc aggggggatg gtggatccag     960
gagagaagat tagtgccaca ctgaaaagag aatttggtga ggaagctctc aactccttac    1020
agaaaaccag tgctgagaag agagaaatag aggaaaagtt gcacaaactc ttcagccaag    1080
accacctagt gatatataag ggatatgttg atgatcctcg aaacactgat aatgcatgga    1140
tggagacaga agctgtgaac taccatgacg aaacaggtga gataatggat aatcttatgc    1200
tagaagctgg agatgatgct ggaaaagtga atgggtgga catcaatgat aaactgaagc    1260
tttatgccag tcactctcaa ttcatcaaac ttgtggctga gaaacgagat gcacactgga    1320
gcgaggactc tgaagctgac tgccatgcgt tgtagctgat ggtctccgtg taagccaaag    1380
gcccacagag gagcatatac tgaaagaag gcagtatcac agaatttata ctataaaaag    1440
ggcagggtag ccacttggcc tatttacttt caaaacaatt tgcatttaga gtgtttcgca    1500
tcagaataac atgagtaaga tgaactggaa cacaaaattt tcagctcttt ggtcaaaagg    1560
aatataagta atcatatttt gtatgtattc gatttaagca tggcttaaat taaatttaaa    1620
caactaatgc tctttgaaga atcataatca gaataaagat aaattcttga tcagctataa    1680
aaaaaaaaaa aaaaaaaaaa aaa                                            1703
```

<210> 246
<211> 1120
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (927)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (968)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (972)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1002)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1053)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1081)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1113)
<223> n equals a,t,g, or c

<400> 246

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ctaggaaaca tggtgtctct cagggaattg cttttaaata acaatctgtt acgggttttg     180
ccttatgaac ttggtcggct cttccagcta caaactctag gtttgaaagg caatccttta     240
tcacaggata ttctcaactt ataccaggac ccagatggaa cccgaaagct actgaacttc     300
atgcttgaca atctcgcagg taactgttag tgacaaagct gtaaaataaa ttctacagat     360
attatgaact agctaatata tgttcctcaa gagcatctga ctgttttta taattgccta     420
tgggtttgga gttccttcca ttgtatatcc tacgttagtg gaacattctt cttttcatat     480
actgaatgtt ttctatttac caagcaatat gttaggagat tagttgcatt attttgttta     540
agaacctagg acataggaac tttaactcac agtttagaga tgcaaattct gagattcaga     600
gactggggag aatattttg aaacgtcctg cagcaaagtg gtactttttt gagacaaggt     660
cttgctctat tgcccaggct gaagggcaag tggcatgatc acggctcact gcagcctcaa     720
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gcgcgcacac ccacactcag tcccagagtg gtccatttgt tacagctgat gaatctacat     840
ggacacatcg tcaccaccca aagcccacag tttacaatgg ggctcactct tgatgctgca     900
cattctctgg ctttggacaa atgtatnatg acctgtatcc accatcacag tgtcaggcca     960
gagcagtntt cntacgccta tagtcccagc tactcgggag gntgaggcag gagaatggcg    1020
tgaacccggg aggcggagct tgcagtgagc cgngatcgcg ccactgcact ccggcctggg    1080
ngaaagagcg agactccgta tcaaaaaaaa aanaaaaaaa                          1120
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147

<210> 247
<211> 1832
<212> DNA
<213> Homo sapiens

<400> 247
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aattaagaat tttgtaaaat aataaaata atagaatcca ggctgcccat ctttgtagtt   120
tagagatggt aggttcttct aaggggtagt aattggcctt tgaaagttca cattcataac   180
ttctttctta agttgggtgg agagagggaa gccaatggcg tttttttttt tttggttttt   240
ttgttttttt taaacatcaa agtgcactgt cagagtgccg agtcctgatt ggtggaatga   300
tgatggtatg atttgattct cccaaatcat cttgaaaaa ctgtgaaaca tacaataagc   360
ttattccttg cctaattacc ggttgctggg tcccaggggg ttgctggaac acggagacta   420
atcagatgat tcttgtcttt aaggagcatg tggaagaggg gacagatgaa taccccatct   480
tcctgctctc catcagtccg ccctggtgtg atgtgcctaa gcagttccga gtaatcttct   540
ggaaaaaata aataggcaac tgcgatgagt ttgtgcaagg atcctaatgg aatgaataat   600
aataacacac cactgacagc gaacgctgag tggtcactgg tgctaggacc atgcaagggt   660
tccctacatg tactttaggg tagaaagagg ccaagaggaa agtctattag gtcagatctg   720
tgactctgaa tagccatcca ccattgagct cagaaccctc agggacctgg ccgatggcag   780
gctgcatgct gctgcaccat gagtcagcac cagactggga gacgcagcca ctcagggatc   840
caagggactc aaacatctgc aacctggccc caggccaaga gaccaaactg caggctccgg   900
atttgcggcc ctgtaggata ggctcaaaat gaaacatgtt tgttatttct aagtggatgg   960
gaactgaaag aacccgaaca atcagtgtac aaggattcat gaatggacca aacatgcttg  1020
cttttgttc ttgaaagatg tttgttgtat ttaatatata acgagaagag tggtcaacgc  1080
tgactgggtg ctgagcactt taagtgcatt acctgggtgg ctggctgggc tgtgccaggg  1140
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gctccagcac accccaagct gaccctggtg ggggtagggc ccctcaccca aacctggcct  1260
ctcccgtctc ttgttctgct gcctcagctt tctcctgtct gtggtagagt ctgcttggac  1320
agactctggg cagggcaggg ggcagggcaa gctggagaga gaattcgttc taggttgatg  1380
tgggatgata gtggctggta gggcgcttgt atcctattgg aaatccatga tgagatccca  1440
ttcattccca cccttctctt aacaatgtct ccttaagtcc aagtctcaag tcgggtgccc  1500
agtttcatac catccttcct ctccctctca caaccttcgg gcaggaccaa ccccctcaga  1560
ggaacccctg ctgccccagc cctttcaggc tctgtgccca ggatctcccc tccactccct  1620
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gttgaggtgg aggtcgaggc tgcagtgagc tgtgatctca ctactgcact ccagcctgtg  1740
caagagagtg agacccccgtc tctaaataat aataataata ataataataa taataataat  1800
aaatttaaag aaaaagaaaa aaaaaaaaaa aa                                 1800
                                                                   1832
```

<210> 248
<211> 1247
<212> DNA
<213> Homo sapiens

<400> 248
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attcctgtca gtagcaaccc tggcagtgtc cggagcggct ctagacaact ttggtcatag   180
gaactctgga ggtgggttct ggtcatctga ggtggctact caacaggttt gaggccccac   240
agcaacagaa gtccaggacc cactaggttg cctcagaagc cctaagactg atgagctgga   300
gcgcgcattt gagagaagcc tcgcacccac tgtgtactgg ccccgctcag gccggcctgg   360
cacaccgttg cctgctggcg gctctcatgg ggaagcgcct gggcactggg gattgcttgt   420
ggcccactca actcttgggg cagtggcccg taaccctagt ttgcctgagg cccttatgtc   480
cccttatgtt cctggtactg gagcttgagc tcttgcctgg aacgctgcag ctgcacccac   540
cctgcttgat cccacctggg aggccaggac actgaggagc tctgaaccca gcccacaggg   600
aagcagagga aggtgagccc ccgccgcccc ccagcccttc ccatccttc cctgctccct   660
ggtggtctaa ggacccaagc tccctagact tcctcttcca ccgtctgtac gtttcaaatt   720
acactggtgt aggcctgtac tgctggtggg ctgggcccc taaacgccag aaagtgaatc   780
ttaagaagct ctgccctaaa ctgagaacca catgctgagg gaagggctga aaggtgaagg   840
ctcagcctcc ctcacatggg tcctgggtta cattaggtac cgggctgatt gataggcatt   900
tggccatggt tcctttttcgt ctacctttgg gggccttctc aggcccagaa caaggctgtt   960
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148

```
gttactatgt ggaaaagctg accagtgctg cacactaggg gcacacacct ttccatgagc    1020
agctcctgcc ctgtggcgac agccagcgtg cacccagacg ctggtgccat ggcgaagcag    1080
gcgttcaaga ccatggagaa gccaactcct catttagaaa atgaggcccc ctcagtgcca    1140
aacccccctt tttataccaa tcagtatcct ctgttcatta aaactggctt ccaaaaaaaa    1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa                   1247
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<210> 249
<211> 621
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (54)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (451)
<223> n equals a,t,g, or c

<400> 249
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ctggaatatt cttactcagg atatggattt gcctttccta catgcaattc ttctgccaag    180
agtaccatcc atggacttgc agaactgcct tgtcgactgc catggtatta cacatagcat    240
tgcttttgac caaggaacty actctacaga cagaaatgcg gcaatgcatt cgtgatcatg    300
gcgttcactg ktcttaccat gctccccttg atcctgaagc agctggcttg agagaacaat    360
agaatggcta tttgaagtca taattacaat gccaaccagg tgacaatact ttgcagggct    420
agggaaaagt tccccagaag gctgtatatg ntctgaatca gcatctagta tatggtactg    480
tttctcccat aggtaggatt cataggtcca ggaatcaatg ggtgaaagta gaagggacac    540
cactcaccat tacccctagt gagccactag caacattttt gcttcatatt cccatgacat    600
tatgttctgc tggcttagag c                                             621
```

<210> 250
<211> 866
<212> DNA
<213> Homo sapiens

<400> 250
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ctgcttacgg cgcctctacc atgcctggct ggcagcagtg gtcatctttg ggccgcttct    120
gcagttccat gtcaaccctc ggactatctt cgccagccac ggcaacttct tcaacataaa    180
atttgtgaat tcagcctggg gctggacatg cactttctta ggggcctttg tgttgctggt    240
ggtgttcctg gctacacggc gcgtggcagt aactgccaga cacctgagcc gactggtagt    300
aggggcagcc gtgtggcggg gagccggccg ggccttcctg ctcatcgagg acctgactgg    360
ctcctgcttc gagccactgc cccagggtct gctgctccac gagctgcctg accgccgcag    420
ctgcctggca gccggcacca gtggcgaggc tacaccgtct cctccacacc ttcctgctca    480
ccttttgctg cctgctcatg gcagaggaag cagctgtgtt cgccaagtac ctggcccatg    540
ggcttcctgc cggcgcccca ctgcgccttg tcttcctgct gaacgtgctg ctgctgggcc    600
tctggaactt ctgctgctct gtaccgtcat ctatttccac cagtacactc acaaggtggt    660
gggcgccgca gtgggcacct ttgcctggta cctcacctat ggcagctggt atcatcagcc    720
ctggtctcca gggagcccag gccatgggct cttcccccgt ccccactcca gccgcaagca    780
taactgaaag aaataaaaac catcgggcct gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    840
aaaaaaaaaa aaaaaaaaaa aaaaaa                                         866
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<210> 251
<211> 3057
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (712)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1252)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1453)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3041)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (3048)
<223> n equals a,t,g, or c

<400> 251

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gagaaagacc tcaaacaaga acctctcgat gaccctactt gsatagacac atcagaaaca     180
tctctttcaa atcagaacaa gctgttctca gacattaatc tgaatgatca ggagtggcaa     240
gaattaatag atgaattggc caacacggtt cctgaggatg acatacagga cctgttcaac     300
gaagactttg aagagaagaa ggagccagaa ttctcgcagc cagcaactga gacccctctc     360
tcccaggaga gtgcgagcgt gaagagcgac ccctctcact ctcccttcgc acatgtctcc     420
atgggatctc cccaggcgag gccttcttct tctggtcctc ccttttctac tgtctccacg     480
gccactagtt taccttctgt tgccagcact cccgcagctc caaamcctgc aagctcacca     540
gcaaactgtg ctgtccagtc ccctcaaact ccaaaccaag cccacactcc aggccaagct     600
ccacctcggc ctggaaatgg ttatctcctg aatccggcag cagtgacagt ggccggttca     660
gcgtcagggc ctgtggctgt gcccagctct gacatgtctc cagcagraca gntcaaacag     720
atggctgcac agcagcaaca aagggccaaa ctcatgcagc agaagcagca acagcaacag     780
cagcagcagc agcagcagca gcarcagcag cagcagcagc agcaacagca ctcaaatcag     840
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gaaaaaccaa atagcccaat gatgtacccc caagccttta acaaccaaaa ccctatagtg     960
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aatattctga cttatggcaa cactaaaccc ctgacccact tcaatgcaga cctgagtcag    1140
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cagcaacagc agcagcaaca gcaacagcag cagcagcagc agcagcagcc gncaccttca    1260
cagctycagg cccccarggc acacctgagc gaagaccaga aacgcctgct tytyatgaag    1320
cagaaaggag tgatgaatca rcccatggct tacgctgcac tttcattcca cggtcaggag    1380
cagcatycag ttggacttyc ccgawccaca kgscccatgc agtcytccgt gcccccaggc    1440
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caagcagcca tcatgaagca gatgctcatt gatcagcggg cccagttgat agagcagcag    1560
aagcamcagt tcctgcggga gcaaaggcag cagcagcagc agcagcagca gattttggcg    1620
gaacagcagt tgcagcaatc acatctaccc cggcagcacc tccagccaca gcggaatcca    1680
tacccagtgc agcaggtcaa tcagtttcaa ggttctcccc aggatatagc agccgtaaga    1740
agccaagcag ccctccagag catgcgaacg tcacggctga tggcacagaa cgcaggcatg    1800
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atgggaatag gaccctccca gaaccctggg acgatggcca ccgcagctgc gcagtcggag     1860
atgggactgg cccttatag caccacgcct accagccaac caggaatgta caatatgagc      1920
acaggcatga cccaaatgtt gcagcatcca aaccaaagtg gcatgagcat cacacataac     1980
caagcccagg gaccgaggca acctgcctct gggcaggggg ttggaatggt gagtggcttt     2040
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gtaggccagg ccttgcctag gccccaagcc cctccaaggc tgcagagcct tatgggaaca     2160
gtccagcaag gagcacaaag ctggcaacag aggagcttgc agggcatgcy tgggaggact     2220
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gtgaaaaaga aacaggatgt tgacccatcc ttgttttttg tttttttgac ccacgtaaac     2820
tgagcaaaac tgcagctggc tgacaatgga agatccaggt gccaatccac agccccacca     2880
ggcctcattt cacctgattt tcacacagca atcgagatga gacgccatgc agatcccggc     2940
tgcgagagag ggagacaccc ggaggagcag gtgggaagat gaagccggcc agagcccctc     3000
tgccagcatg ccctgtgatc gcctggccca gcaggaactg nttcaccnaa aaggact       3057
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<210> 252
<211> 5279
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1371)
<223> n equals a,t,g, or c

<400> 252
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tggcggcggc ggcggcggcg ggcgcgggcs ckgagatggt ccgcgggcag gtgttcgacg      120
tgkggccgcg ctacaccaac ctctcgtaca tcggckakgg csctacggat ggtgtgctct      180
gcttatgata atgtcaacaa agttcgagta gctatcaaga aaatcagccc cttttgagcac     240
cagacctact gccagagaac cctgagggag ataaaaatct tactgcgctt cagacatgag      300
aacatcattg gaatcaatga cattattcga gcaccaacca tcgagcaaat gaaagatgta      360
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ctttctaaca ggcccatctt tccagggaag cattatcttg accagctgaa ccacattttg      780
ggtattcttg gatccccatc acaagaagac ctgaattgta taataaattt aaaagctagg      840
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aagctcaaag aactaatttt tgaagagact gctagattcc agccaggata cagatcttaa     1140
atttgtcagg acaagggctc agaggactgg acgtgctcag acatcggtgt tcttcttccc     1200
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gcagccgcac cagagagaga ttcttcccca attggctcta gtcactggca tctcacttta     1560
tgatagggaa ggctactacc tagggcactt taagtcagtg acagcccctt atttgcactt     1620
cacctttga ccataactgt ttccccagag caggagcttg tggaaatacc ttggctgatg      1680
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151

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ttgcagcctg cagcaagtgc ttccgtctcc ggaatccttg gggagcactt gtccacgtct    1740
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gaaaatgcag tcattttttct aaataaaaag gaagtactgc acccagcagt gtcactctgt    1860
agttactgtg gtcacttgta ccatatagag gtgtaacact tgtcaagaag cgttatgtgc    1920
agtacttaat gtttgtaaga cttacaaaaa aagatttaaa gtggcagctt cactcgacat    1980
ttggtgagag aagtacaaag gttgcagtgc tgagctgtgg gcggtttctg gggatgtccc    2040
agggtggaac tccacatgct ggtgcatata cgcccttgag ctacttcaaa tgtgggtgtt    2100
tcagtaacca cgttccatgc ctgaggattt agcagagagg aacactgcgt ctttaaatga    2160
gaaagtatac aattctttt ccttctacag catgtcagca tctcaagttc attttttcaac    2220
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cagtcctcac cacccagccc agggtgctca crctcaccac tcctgtggct gaggaaggat    3240
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atgtgactgt taccggataa cactgattag tcagttttca tttataaaaa agcattgaca    3420
gttttattac tcttgtttct ttttaaatgg aaagttacta ttataaggtt aatttgsagt    3480
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152

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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (490)
<223> n equals a,t,g, or c

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<222> (906)
<223> n equals a,t,g, or c

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<210> 254
<211> 1162
<212> DNA
<213> Homo sapiens

<400> 254

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ccttcaaatc tttgcccact gccatcacat taatgccttc tttgacctta ttttatctgt     300
tatagtaatg agctgccctg ttctttctat ctttaatctc cccactccac cttgtcctta     360
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aaaaaaaaaa aaaaaaaaaa aa                                              1162


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<211> 807
<212> DNA
<213> Homo sapiens


<400> 255
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atggcttcct tgtaagcgaa gtctatctat atttaaaatt ttaatagata ttagtaggta     180
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aaattggtat tcagacatat tccaatgttt gtagctattt acaatgcatt cttgctgtat     420
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<210> 256
<211> 2284
<212> DNA
<213> Homo sapiens


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aaaa                                                                  2284
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<210> 257
<211> 4043
<212> DNA
<213> Homo sapiens

<400> 257
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155
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<212> DNA
<213> Homo sapiens

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156

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gtatggaatg  ggagaagtga  aagttcagtt  atagaacttt  ccatacttcc  aagtttactg   2160
caagttttta  tgcttgagag  agatgctttc  taatataaga  ctgatgtgtt  gattttactg   2220
attgtactgt  acatctatta  aagccttaga  ttattacatt  acgggttgga  acccatacca   2280
atgtaatttc  aatcgtgtta  agaaagtaat  ggtgacttca  catgttattg  tagttagtta   2340
cattatagaa  tattacttat  ttttcttgtt  aaaatgtagt  ttttcatttc  ctacatttat   2400
tagattttca  ttttctatta  acaattgaat  accatttcag  tttatagact  tgttttatta   2460
gattttacca  atgaattttt  caaaatacaa  aaaaaagtag  tttttccttc  ataacatact   2520
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taagaagtta  agttgttgct  atcgcaacaa  tcctggcaga  caattgagta  atattttgat   2760
gatttatttt  gtttgtaatt  agttattata  agaagatcta  gatcctagat  attagaataa   2820
aatttatttt  ctactgtatc  catttcaaat  gttaaaatat  tgtttaatat  ttttgaaatc   2880
cctgagtatc  aggccttgtt  ataaataagc  tgcataatca  ataaatagaa  caagggactt   2940
tttgttgata  atccaaatac  tcaaagttta  cgtaatgaaa  attatagcgt  gtgtgcaaac   3000
tcttgagggt  tgattatgct  gcaatttagc  atgttggaac  gtctagggag  aaggttgact   3060
ttttgcactt  ctgtatatag  tcaaaagaga  gaaacctgta  taatagtaag  atcttatttt   3120
gaataaaaac  gtctataatt  acaaggagtt  ttgttaaggc  taatacaatg  acagactgag   3180
caaaattgct  tgcaaaagtg  gcacagagtt  agcactccat  accccttcaa  acatgttgct   3240
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tcctttcaaa  ccctcatgac  tgacaaaaac  tccatggggc  caaatctgcc  tgaagatcat   3360
taccaaaaat  agcaggtact  tctaccatta  aggtgaaatc  atggatcaga  tattccttac   3420
attttcaaa   actactgcat  gtttaaaact  tcaacaaaaa  aagagagaaa  gaactatact   3480
aagaacatat  attattcaga  tcagtttctg  ccaatttcag  tggtttattg  ttcacaaaaa   3540
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gcacactgta  gctatagttg  ttatgtgatt  gtttttaat  tgctgtagga  tcctgttctt   3660
tcagcaggtg  aaaaataaaa  cgcagttcaa  atttcatggt  tttaattttc  aactcagaag   3720
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ttcactccag  ctggttaaaa  atgttgcact  tatcagcaac  cctaccactt  tgcatctgct   3840
gaaaggacaa  atgtgcttgg  ktttactatt  atgtaatcac  aacttacttt  ctgcttgtag   3900
ttgcttaaaa  ttatgtattt  tgtcttgggc  tgcaatttgt  tttatgctta  ttttattatt   3960
actgcagtag  ttgaccttgc  tgtatggaaa  aataaagtga  aattgcccta  ataaaacttc   4020
tctttcttaa  gtaaaaaaag  ggaa                                             4044

<210> 259
<211> 711
<212> DNA
<213> Homo sapiens

<400> 259
gtgagaaaag  cagtttgggt  gacaaatcct  gtgtggcaca  agttggatcg  cttcctagaa    60
ataagcaaca  cctctcccaa  aaagcagccc  acaaggcagg  ggcccagcag  cccagccatc   120
actcatcttt  gaggaaatga  gttggtagcc  tctgtgcact  gtttggtggc  cacatcacag   180
gtgatgtcct  gttcacatac  ctgcttgtat  ttaaagccct  cagtctgtcc  tgttgtgtgg   240
ggcgaagtga  tggactctgc  caggtggaca  tgctgtgggt  ggatgttccc  ggcgtgtgcc   300
gggcctgaat  ggacaggggc  cacttcacag  catgtcaggg  aaaatcactg  tcacacaatt   360
ccaatggatt  ttgtgctctt  tttgaaaaaa  aaaaaattct  ttagcgtaaa  catgaatttt   420
ttttcaatgt  agcccctggg  gaatgaatga  aattttgagc  ttcttcaata  cgtaaaatta   480
aatttatacc  actgagggag  agacccttc   tgaaagaagt  atggccaaaa  gcactttaat   540
gctgctgaca  ttgttgtttt  tatgttcatt  tgctggagcg  caagacgtgc  tgacacagtg   600
agttttctct  gatgtattta  aggtgatgta  tttgcttgag  ttactcctgt  atcattgctc   660
ataatattgg  aaactaaaat  aaaacctagt  tggaaaaaaa  aaaaaaaaa  a             711

<210> 260
<211> 1113
<212> DNA
<213> Homo sapiens
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<220>
<221> SITE
<222> (119)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (121)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1098)
<223> n equals a,t,g, or c

<400> 260
aattcggcac gagggaagac caggcagccc agctgaaggc agtaagctcg gctcacagtc      60
gcaggagagt tctggggtac acgggcaaag gggcttgaga aggcccggag gcgaagcgna     120
ngagaagcaa ctgtgccccg gagaagagaa gctcgcccat tccagactgg gaaccagctt     180
tcagtgaaga tggcagggcc agaactgttg ctcgactcca acatccgcct ctgggtggtc     240
ctacccatcg ttatcatcac tttcttcgta ggcatgatcc gccactacgt gtccatcctg     300
ctgcagagcg acaagaagct cacccaggaa caagtatctg acagtcaagt cctaattcga     360
agcagagtcc tcagggaaaa tggaaaatac attcccaaac agtctttctt gacacgaaaa     420
tattatttca acaacccaga ggatggattt ttcaaaaaaa ctaaacggaa ggtagtgcca     480
ccttctccta tgactgatcc tactatgttg acagacatga tgaaagggaa tgtaacaaat     540
gtcctcccta tgattcttat tggtggatgg atcaacatga cattctcagg ctttgtcaca     600
accaaggtcc catttccact gaccctccgt tttaagccta tgttacagca aggaatcgag     660
ctactcacat tagatgcatc ctgggtgagt tctgcatcct ggtacttcct caatgtattt     720
gggcttcgga gcatttactc tctgattctg ggccaagata atgccgctga ccaatcacga     780
atgatgcagg agcagatgac gggagcagcc atggccatgc ccgcagacac aaacaaagct     840
ttcaagacag agtgggaagc tttggagctg acggatcacc agtgggcact agatgatgtc     900
gaagaagagc tcatggccaa agacctccac ttcgaaggca tgttcaaaaa ggaattacag     960
acctctattt tttgaagacc gagcagggat tagctgtgtc aggaacttgg agttgcactt    1020
aaccttgtaa ctttgtttgg agctggcacc tcttgaaata aaaggagga tgcacgagca    1080
aaaaaaaaaa aaaaaacncg aggggggggcc cgg                               1113

<210> 261
<211> 982
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (970)
<223> n equals a,t,g, or c

<400> 261
agcgccaggc tgcctactgg taatctgtgt atagtatata aacatgtaaa aataggttgt      60
attktactct atgtatgatg ctaatcaatg aacactttat ttattttaca gagaaaactt     120
atctgtgaac tttactatat atctgtttat tttactttat ttttttttta aataaaaagg     180
gttttaaatg ctatgcagtc attagtagaa aattttttag gactctgcct gctctgtaac     240
tatcttaata tgatctggca gaaactcgca tgtatccaag taaagtagtt tagctaaaga     300
aaggttcttc attgcttttc tgttcacagt tgtggctctg tttttttaaga atgtaacttg     360
ttttagatt atacttgcat ctgtgacttt actaccagcc acgttgacac aaaacaggtt     420
ctggttcagg taaagttgcg tcagtcacct gcagcagaaa tccctcttca ttcctcttct     480
ctgtgttcat tcctcttctg tgctgttctg aagcttctac caatactctt ccatattgt     540
ctttttcagt gaagagaaat gcattcaaga ttaggtccct cctgtctatc cagtttcagg     600
attttatgtt gttttataca cagttatttc agtatagaaa ctggctttat tgccaagtgt     660
ttttttaaac atgttttaac tctcatatga gcaaactgtc caacttcagt ttttcataag     720
attaaacttc ttacgatcaa atttgtctct tgcaatgatg tgatgagttg ccaaataatt     780
```

158

```
gagattattt taaaatgttt tgttcatatt cttgttttat aattaaaatt tacattcagt      840
gtgtatgggt tttttttttt attttgactc ttaatgtaag gtggatattt ctgtcatttt      900
acatggtttc ttactgagat tttatatata aattataaaa tgtttaccaa aaaaaaaaaa      960
aaaaaaaaan aaaaaaaaaa aa                                               982
```

<210> 262
<211> 778
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (445)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (655)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (690)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (699)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (733)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (746)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (771)
<223> n equals a,t,g, or c

<400> 262
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gaattcggca cgagtcttta tgcactttcc tgtttcgttc tcaccacagt gatgatctcg       60
gtcgtccacg aacgagtacc tcctaaggag gtgcagcctc cactaccgga cacattttt      120
gaccatttta accgggtgca gtgggccttt tctatttgtg aaattaatgg catgatcctt      180
gtaggactct ggttaattca gtggctgctc ttaaaataca agtaagtcaa gtaaaaaaaa      240
aaaaaaaaaa ctcgagggggg ggcccggtac ccawttcgcc ctatagtgag tcgtattaca      300
attcactggc cgtcgtttta caacgtcgtg actgggaaaa ccctggcgtt acccaactta      360
atcgccttgc agcacatccc cctttcgcca gctggcgtaa tagcgaagag gcccgcaccg      420
atcgcccttc ccaacagttg cgcanctgaa tggcgaatgg caaattgtaa gcgttaatat      480
tttgttaaaa ttcgcgttaa atttttgtta aatcagctca ttttttaacc aataggccga      540
aatcggcaaa atcccttata aatcaaaaga atagaccgag ataggggttga gtgttgttcc      600
agtttggaac aagagtccac tattaaagaa cgtggactcc aacgtcaaag ggcgnaaaac      660
cgtctatcag ggcgatggcc cactacgtgn aaccatcanc ctaatcaagt tttttggggg      720
tcgaggtgcc ggnaagccct aaatcnggaa cctaaggggg agcccccga ntttagag        778
```

<210> 263

159

<211> 1234
<212> DNA
<213> Homo sapiens

<400> 263

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gcaaagcctc  ttctaagaat  agctgtgaag  ggagctggaa  gctatgagat  cagaatgaat     60
aataattttt  gcatttcaca  caaaagccag  gtaggaagta  aagcataatg  ggggcctctt    120
ggatgccagg  tgtttaacac  ctgatggcat  ctaatcctca  caaaaacctt  cactggtgcc    180
accatgccca  gatgagacat  gagagggtct  gagaggctga  ggaacctgcc  cgttgtctca    240
ccacaaatgc  tgacccagcc  aactgctcac  cctggccccc  cgcccccagc  ccccaaaccc    300
agtcctttct  acaacctgct  ctctctccaa  atagcagtag  tcagaggctg  tgctgaggcc    360
tcccagaaac  cttttcccta  tgtggatgta  accttctcga  gacctgcttt  tggagttcaa    420
cctgtgctga  aggggcagag  aaaaatccta  tgtcatgagg  ggcacttgag  ataagcctca    480
taggaggaga  gaagcttctc  cctgtgtgga  aggaggcagc  acacaggcca  cagagaggcg    540
cagaagggac  aactgaggcc  aagagaggcg  gaaggtcccc  agacgggttt  tctaaaatat    600
ctttctctga  atagcatttt  tacttaaatt  tgatatgcaa  atgcagataa  ttggtattca    660
tgtaaatatt  tactgcttaa  aacagaaagt  tacttgtaat  aggccaggca  cagtggctca    720
cgcctgtaat  cccagcactt  tgggaggctg  aggcaggcag  atcacgaggt  caaaagatcg    780
agaccatcct  ggccaacatg  gtgaaacctt  gtctctacta  aaaatacaac  aattagctgc    840
ctcaggaggc  tgaggcagga  gaatcacttg  aaccagggag  gcagaggttg  cagtgagccg    900
agatcgcacc  actgcactcc  agcctggtga  cagagcaaga  ctccatctcg  aaaaaagaga  \   960
aagttactta  taatagaaag  cctgttcaaa  tgtggcaagt  gcaacgtatt  cttttggagg   1020
ctctaaaccc  aagcctgcag  gtccctgata  cgtcttcttt  gccatctagt  ggtagccatt   1080
agaactgcat  gtgtgggccc  ggcgccgtgg  ctcacgcctg  taattcccgc  attttgaggg   1140
gccgaggtgg  gtggatccct  tgagcccagg  agtttgagac  agcctggaca  acatggcaaa   1200
gcctgtcaaa  aaataaaaaa  aaaaaaaaaa  aaaa                                 1234
```

<210> 264
<211> 876
<212> DNA
<213> Homo sapiens

<400> 264

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ggcacgagct  ggcccccatc  gccgtctcag  tgcggcgatt  cttcctggtg  gaggcctccg     60
tctacgccta  caccatgttc  ttctccacgt  tctaccacgc  ctgcgaccag  cccggggagg    120
cggtgctgtg  catcctcagc  tacgacacgc  tgcagtactg  cgacttcttg  ggctccgggg    180
cggccatctg  ggtcaccatc  ctgtgcatgg  cacggctcaa  gacagtcctg  aaatacgtgc    240
tgtttcttct  gggtacactg  gtcatcgcca  tgtccttgca  gctggaccgc  aggggcatgt    300
ggaacatgct  ggggccctgc  ctctttgcct  tcgtgatcat  ggcctccatg  tgggcttacc    360
gctgcgggca  ccggcgccag  tgctacccca  cctcgtggca  gcgctgggcc  ttctacctcc    420
tgcccggcgt  ctctatggcc  tctgtgggca  tcgccatcta  cacctccatg  atgactagcg    480
acaactacta  ctacacccac  agcatctggc  acatcctgct  ggccgggagc  gcagccttgc    540
tgctgccgcc  acctgaccag  cccgccgagc  cctgggcctg  ctcgcagaaa  ttcccctgcc    600
actatcagat  ctgcaagaac  gatcgggagg  aactgtacgc  agtgacgtga  cactggcctg    660
gggacagctg  ctgctctgat  gactcttcag  ccaggagctg  tatcgagggg  agcgcctggt    720
ccagccctgg  acagattgat  ttccagctga  ataaattggc  ctagataccc  tcaaaaaaaa    780
aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa    840
aaaaaaaaaa  aaaaaaaaaa  aaaaaaaaaa  aaaaaa                               876
```

<210> 265
<211> 822
<212> DNA
<213> Homo sapiens

<400> 265

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ggcacgaggc  tttgggcagt  tatggcagta  tggcattagc  tgagaggtgt  ctgccacttc     60
tgggtcaatg  gaataataaa  ttaagtacag  gcaggaattt  ggttgggagc  atcttgtatg    120
atctccgtat  gatgtgatat  tgatggagat  agtggtcctc  attcttgggg  gttgccattc    180
ccacattccc  ccttcaacaa  acagtgtaac  aggtccttcc  cagatttagg  gtactttat     240
tgatggatat  gttttccttt  tattcacata  accccttgaa  accctgtctt  gtcctcctgt    300
tatttgcttc  tgctgtacaa  gatgtagcac  cttttctcct  ctttgaacat  ggtctagtga    360
```

```
cacggtagca ccagttgcag gaaggagcca gacttgttct cagagcactg tgttcacact      420
tttcagcaaa aatagctatg gttgtgacat atgtattccc ttcctctgat ttgaaggcaa      480
aaatctacag tgtttcttca cttctttttct gatctggggc atgaaaaaag caagattgaa      540
atttgracta tgagtctcct gcatggcaac aaaatgtgtg tcaccatcag gccaacaggc      600
cagcccttga atggggattt attactgttg tatctatgtt gcatgataaa cattcatcac      660
cttcctcctg tagtcctgcc tcgtactccc cttcccctat gattgaaaag taaacaaaac      720
cccatttcca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                         822

<210> 266
<211> 513
<212> DNA
<213> Homo sapiens

<400> 266
ggcacgagct gcacccagcc gaactgtgtc ttctagttct ttttttagga ccttaaacat       60
tgtttacttg attgaaattt aaattttata ttacatttgt aataaaacta gaaagcatag      120
ataagctatc aatcaaaatc acccaaatcc tgtgactact actcactgca aacattttaa      180
tgtgcaattt gtacttaatt ctttactttg taatacatac aaatatgtcc agacactgtg      240
acatatgctt gtgaactttt caaaggtgat atcctgctgt gtattatatt ttgttctttt      300
catgtggcac attacaaatg ccctgtaata cagataatta tcaaatactt cttagcattc      360
ttttatgtat aaatgtacca tagtagtaaa tttcttcctt cacattgaga cttttttttaa      420
aactataaac agtactctga attgctataa aatatgttct atatcaattc attcaaataa      480
atatatagaa gttgaaaaaa aaaaaaaaaa aaa                                   513

<210> 267
<211> 888
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (99)
<223> n equals a,t,g, or c

<400> 267
ggcccggcta attttttgtat ctttagtaga gacggggttt cgccgtgttg gccgggctgg       60
tcttggactc ctgacttagg tcatctgccc accttgtgnc tcccaaagtg ctgggattat      120
ggtsatgagc caccatgccc agcctgcata cctttttttt attgttgcct tttgtttttta      180
tgcctgtagc ttttacatta cattaaacag ttttttgaaaa ttgtcagact gttaataaca      240
ttagtttttat cttgtttgaa aattatttag taaggagaaa gaaaaataca aattcatgtt      300
ttaattgata gttgtacgag cctcatagca atatttccat gtgctatatt cagttattgc      360
ttaaacaatt ttgtaattaa cacttatatg tcaggatctg ttttctcaag taaacttcgg      420
tttttccacc aaaatggtgt gggttttttt ttttttaata tattgtaatc tgtatttcct      480
actactgccg tgtcattgga gaaacagtaa attaaacctg aagaactcct gaataactta      540
acttcttcgt ttagaaatgc ttgaaaatag agttgcaggc caggtgcagt ggctcacgct      600
tgtagtccca gcactttkgg aggccgaggt gggcggatca yttyaggcca ggagtttaag      660
accagcctgg ctaatatggc gaaggtccgt ctctgctaag gatagaaaaa aattagctga      720
gcgtggtggc acacacctaa tcacagctaa taaagagtct gagacacaag aattgcttga      780
acccaggagg cagaggttgc atgcagtgag ccgagattgt accactgcac tccacacttc      840
gcgacagagc cagattctgt ctcaaaaaaa aaaaaaaaaa aactcgag                   888

<210> 268
<211> 1064
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (116)
<223> n equals a,t,g, or c
```

161

<220>
<221> SITE
<222> (309)
<223> n equals a,t,g, or c

<400> 268

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aattcggcag aggtcttgca taatgaaatc cttttttggc taagtattta attcgaacat        60
atttgccttt ttaaaaagtg cttggcctaa acttattgta actgcatgaa ataagncatt       120
tgcttaaaac ttaacattgt aaaattgttc tctctgaaat gagtgcagaa tttaaatcat       180
ggccaaatgt attactatta ccctatttac agtaatttsc tttgcagaaa atatttctyc       240
atcatggaac tgtgaaatca aattgaagat cttactggta aaaatgacaa attaacaaaa       300
ggactaagna caagtggtgc ccaaacaacc tttttattct gcagttccat catcataata       360
gaccagttaa cccaggagtc ctaatgtttt aaaacatcat tgtggtgatc ttgtttattc       420
tatctcacta aggatatcca gtttcctaag ctcttactgg ctagcaattt cgtcttaatt       480
ttattgctaa atgttcaaat tttgcttcca aactcacttt atttttgcag atgtgtacat       540
ctgctaarta ctaattttat gtaaatgatt ttgttgatta tctttccaca tcttaaaatg       600
tttctaacag ctttgagatt ttatctcaac aggctctctc tgaccccaaa gtagtactta       660
ccttcgtgac tactgacaaa gtcacaaaat gcaggcgatg tcatgtattt cggtacaact       720
aaatctagga aacggttttt tcattgcatt actgcatatt ttcatttca tttaaattat        780
gtcccctttt tctcttgctt gaaacagtgc tcctcgaact ttgtcttcca gcacatttta       840
aagagaacca attaaagaac aatcacacat tctgcttatt aaaggctatt taaaaagaaa       900
cattttgtat tagaaaatgg ccaactttaa aacactattt tttacactca taaaaatgtt       960
ttttaaatcg ccttgacaat catcagcttt tgaaatgtga attcctattg ccagagtaaa      1020
ggtctcgttt ttataccacc aaaaaaaaaa aaaaaaaact cgag                       1064
```

<210> 269
<211> 1282
<212> DNA
<213> Homo sapiens

<400> 269

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attttacact taatttataa tatttattga gtatattatg tcctcaacaa gtaactataa        60
aatgaaatac ttaactcggt gaagactatt ttatgcaaag tttttttttt tttttttttt       120
tttagcaatt tcagtgtaat gaaagaattt aagctttgaa tttataattt gctgtggtgg       180
ggttaatttc tgtcagtatt tgagattgta ttatcagtct tgcataatga aatcctttt        240
tggctaagta tttaattcga acatatttgc ctttttaaaa agtgcttggc ctaaacttat       300
tgtaactgca tgaaataagc atttgcttaa aacttaacat tgtaaaattg ttctctctga       360
aatgwgtgca gaatttaaat catggccaaa tgtattacta ttaccctatt tacagtaatt       420
tgctttgcag aaaatatttc ttcatcatgg aactgtgaaa tcaaattgaa gatcttactg       480
gtaaaaatga caaattaaca aaaggactaa gacaagtggt gcccaaacaa ccttttttatt       540
ctgcagttcc atcatcataa tagaccagtt aacccaggag tcctaatgtt ttaaaacatc       600
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aagagaaaaa aaaaagtcg ac                                                1282
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<210> 270
<211> 1154
<212> DNA
<213> Homo sapiens

<400> 270

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<210> 271
<211> 1810
<212> DNA
<213> Homo sapiens

<400> 271
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tcttttttttt tttttttaca tttttatcca taatacaagt aacttgacta aagccagtgt      420
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<210> 272
<211> 1345
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<400> 272

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gattaaatca ctggccattg tgattgagct caatctccag ccccttctct ttcccagaaa    180
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cacctctagc ataaacttag gtatgatcaa aaggggctcg ttagaaataa cagacactcc    360
tatcaggaaa tcccaagatt ctgaggacct gtgtgcaaga aactgggtct ttgtagacca    420
aatatatatt tttcattata ccacaatgct ccataattaa tactttctta ttctacctag    480
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tggattttga ttttctttcc tcttgagttt ttccacttgt gtagaaatta cctcaggtac    600
accatgtgaa ttctgaattc attatttcta ctctgcccca actgtttttt cctcctatgt    660
tctctttctc catttgtgtt gatatcagcc taagccagag acacatgatt ctgaattctg    720
tcttccctct tatccattca gtaaccaatt cttacctatt ttgcttcctt tgtaattctt    780
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<400> 273

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164

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aaaaaaaaaa aaaaaaaaaa aaaaactcg a                                       1831
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<210> 274
<211> 1139
<212> DNA
<213> Homo sapiens

<400> 274
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gcccacctgg tcactaaggg aggggactga tccctggggt ttcctcgttc ctgctgtgga      180
gtgagctggg gcttggtgag caggccagca gagggaggct gtatggtgca tgtgtgatat      240
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gagaatcact tgagaccagg aggcagaggt tgcagtgagc caagatcgtg ccattgcact     1080
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<210> 275
<211> 618
<212> DNA
<213> Homo sapiens

<400> 275
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ggaatgccac aacctgattt ctcctttctt aggatgccac aggtatagta tactactgtt      240
ctatttatat aaattatta acattaagct taaataaatt ggttgaaaat gtttagctag      300
aaaaaataaa atgggcccta ttttcttaa ctttatgagc agcatagatt tatgcttctt       360
accctagctc taatatttat acataaccaa agccctaaga gaagctgaca gggaggaact      420
ggggcagcag gtatcctggc aagattcctc aaactaatag agccagggat cttggcctac     480
agtagcaatt ttcaaacttt ttggtctcag aaacttcaca cttttttttgg aggaccccaa     540
agagattttg tttacttata tccatattta ctgtgtttga aattaaaaca aaaaaaattg      600
aaaaaaaaaa aaaaaaaa                                                     618
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<210> 276
<211> 1121
<212> DNA
<213> Homo sapiens

<400> 276
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165

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ctttccattt ggtcttattt ttatccacat agtttccttg aacaaaggag aaactacata        120
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taattatttt tcagtttccc ctcccaccgg gggctacact gtcctctgca gcttcttctg        960
gacattttgg gcctttctta ccgttgccta aggcaagaat gaacactatg tctggaagat       1020
atttttaact tagttttgtc tcttgttttg tttcttttcc tgggtgtgag caaaaagtat       1080
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<210> 277
<211> 1233
<212> DNA
<213> Homo sapiens

<400> 277
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atgggtggca tctaacaggt accatagaaa ctggatgtat gtgttctcat tgcctgcctg        180
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aaaaaaaaaa aaaaaaaaaa aaaaaactc gag                                      1233

<210> 278
<211> 426
<212> DNA
<213> Homo sapiens

<400> 278
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catttaacaa ggtgcttctt ttcatgtgat gaggccctgt gaagaaggga caggatatac        180
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gaagggcctg agccccaggg acccctcacc tgatgggaat gagagtgtgg ggagcttgct        360
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aaaaaa                                                                   426
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166

<400> 279

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cttagaaaat gtgagcgcac tagattataa gaagccttag cagacagtgt ctgaggatta       300
aagttgcttt tctgctawgk ttcaggtggt taatggaatg aangggttgc ctgtcctgta       360
gctatatcga gaagtttact gactttcttc ggctctttgt gagtgttcac ctaagaagaa       420
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tgttcaagcc cttcctcccc agcatcatcg ccctgtgcat ggagcaagtg tatcccatca      2040
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<210> 280
<211> 894
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<221> SITE
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (852)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (876)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (890)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (891)
<223> n equals a,t,g, or c

<400> 280
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gcctcccaaa cttgaggaaa aggtcagatt ctaagagcta aacgttaaga tgtaatgttc      180
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gccctaattt cactctgcca aaaaaaaaaa aaaaawaact cgantttttt nttttcggta      840
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<210> 281
<211> 1778
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<212> DNA
<213> Homo sapiens

<400> 281

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gctcaccatc tcttaaatcg aatgtcaaaa ctggaccaat ggggccaggc tgaagtattg     180
aactttctgc tacgctacca accccgcagt gaggaagaac tatttgacat tctcaatctg     240
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tgctcctact cggagcccca ctacatcaaa ctacagaaag tggaggtgct gtgtgaactg     540
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gctgaatagt tttatttctg tattagaaac tgtgattgga acaattgaag aaataaaatc    1740
ataacagagw maaaaaaaaa aaaaaaaagg gcggccgc                            1778
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<210> 282
<211> 2498
<212> DNA
<213> Homo sapiens

<400> 282

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ccttcttcag gatggtctaa aagatctcct ggatgagaaa aaattcatcg attgcaccct     180
aaaagcaggt gacaaaagtc ttccttgcca cagattgatt ttgtcagctt gtagtcctta     240
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gtaactgtct agccatccta agattaggac ttcttcttga ctgcccgaga ctcgccattt     540
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cagattccca gaaatcattc cagcattgtt acccagcaaa atcagatata tgtggtagga    1140
ggactatatg tggatgaaga aaataaggat caacctctac agtcatactt cttccagctc    1200
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caaattcaaa tggcaaaaaa aaaaaaaaa aaaaaagg                                2498

<210> 283
<211> 195
<212> DNA
<213> Homo sapiens

<400> 283
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acattccttt acacagccct catggaataa acagcacaaa acagcaacga caacagcaaa       180
aaaaaaaaaa aaaaa                                                         195

<210> 284
<211> 1262
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1041)
<223> n equals a,t,g, or c

<400> 284
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gcagctgtgg cttaaaagtg ggcttctctt gtccttcatc ctcattcttc cttgagcttg       180
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actgtgcact cagaacaacc atgtagtgtc tagcaactca gagttgtgtg ctgtttttga       300
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atagtgaatg tacaaagttg gtaccaagtt acctttattt cagaaagaag catagacttt       420
ctttaatatg gaaaaatctg cctctttaaa atatttggtg ctagggcaaa caccattgtc       480
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tgagtccatc agtcagtgga tgccattttg aaggtgcagt ctggtttcat ggttagctgc       720
cataacatat gccaagtatc ctgctcacat ttacgtctct gaacaaatac gcatcagtct       780
ggtttcatgg ttagctgccg taacatatgc caagtatcct gctcagattt atgtctctga       840
acaaatatgc attctgcttt gttgtgagtt ccagacaagc actttaacca aattggcagg       900
cagtagagat agggaaggag taattgaaaa gtattagaaa ataaaatgat ccaggccagg       960
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170

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tgcggtggct cawgcctgtt aattccagca gtttgaaagg cccaggtggg tggatccctt    1020
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acaaaaatta attcgcgtag tggcacacac ctgtaatccc agctactcgg aaggctgagg    1140
caggagaatc acctgaaccc agatagcggc cgttgcagtg agtcatcatt gcaccactgt    1200
actccagcct cggcaacaga gcgagactcc atctcaaaaa aaaaaaaaaa aaaaaactcg    1260
ag                                                                  1262

<210> 285
<211> 1371
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1155)
<223> n equals a,t,g, or c

<400> 285
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ataagatagc cagttatttt gtgcacattt agcaacaaga acactgaggt tctgggagat     180
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cacattcttt tctctaccct attcctcccc atcaggtgaa gatagctaac tgccatgtat    1260
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<210> 286
<211> 2345
<212> DNA
<213> Homo sapiens

<400> 286
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171

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ctcga                                                                 2345

<210> 287
<211> 1015
<212> DNA
<213> Homo sapiens

<400> 287
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acatcactaa gtattctatt taagaggatt caacgtttag agaatcaaga agtaccagtg      180
gctgcattct cacaatttcc tgcaagaatg agtctctcac ttatctactt tagtgtctca      240
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catattggtt aatagaatgc aacttaggtt taacttataa tacacaattt ggaccaaaaa      960
gttggtacat ggtttaagat tggaattcga tatcaagctt atcgataccg tcgac           1015

<210> 288
<211> 1708
<212> DNA
<213> Homo sapiens

<400> 288
ggcacgagca gaagtgacca tctcaagcat ccggcctatt tcagaaagag ccacaaaccg       60
gagggaagtg gagarccgga gctcaggcct cgagtctagt gaggcgcgtc agaaattcgc      120
aggagccaaa gccatctcat ctgacatgtt ctttgggcgg gaggtggatg cggagtatga      180
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172

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ggccaggtct cggctgcagc agctctcagg cagcagtgcc atcagctctt cagacctctt      240
tggggacatg gatggagctc acggagcagg aagtgtatct ctggggaacg tgctgcctac      300
agcggacatt gcccagttta agcagggtgt caagtctgtg gctgggaaaa tggctgtgct      360
ggccaatggt gtgatgaatt ccttgcagga tcgctacggt tcctactgat ccgagctctg      420
tgactcaggc ttacgatggt gacggcaaca agaactccac agttcccagg ctggggatgc      480
tttgccttgt ggaagctggg gaggatttgt tacttcgtat gtgtggtgtg tgtgtggggt      540
ggcctttgag gcgctcactc ctgtgagggg aatggtcagt accagccctt gtcctctgcc      600
tgtggactga gcccttttatt ccctctcaca ccaccctccg tgtgttagac tcttgtcctt      660
ctgtcctgcc cccacagctg ctgctcactt atcctgccat actgggaaag ggggttcccc      720
cacgatggct tattctgggt ccagactttc cccaggtagg aaagcggaa ggtagaaggc      780
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cttgctgctg ctgctgctgc cagtggcctc ttctgggtgc caggagaggg gaaggacctt      960
tgtctgggcg ttaccaaggg ctggaaactt tacctggtac ctaaaggttt catttggtat     1020
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tgattcgact ctggatgctg tgagcttgat gctggccagg gaagcagagg atgtgagagg     1260
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tcttggtgcc atcttcccct gccgcaccgg cagtctcagc ccagccccca cctttgggtt     1440
gtaggttggg ctcccaagca acacagacca ctcttcccct tgcccctccc ccagagggac     1500
ttgactttct ttctggactg tttgtattga aacaaagtgg tgtcaaaata aagcccctgc     1560
agggcctggc tccctgttgg tctgagtgaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1620
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1680
aaaaaaaaaa aaaaaaaaaa aagaaaaa                                        1708
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<210> 289
<211> 540
<212> DNA
<213> Homo sapiens

<400> 289
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attcggcacg aggtttcagg gtgtctcagg gtccctctgt accatctgct gtggaatgca       60
ggaccctctg tgacattctt tatcccttct ccccgggtt ggtggccatg gagggtcttg      120
tctgctgtga ttcgactctg gatgctgtga gcttgatgct ggccagggaa gcagaggatg      180
tgagaggcag aggcaggctc ctggggctga gctccttcct ctgcatcatt ctgggcttgg      240
cctggacagc acccgccagt gagagctgtg gcctcaccc tctggcagct gagccaagca      300
ctgtcattct tggtgccatc ttcccctgcc gcaccggcag tctcagccca gcccccacct      360
ttgggttgta ggttgggctc ccaagcaaca cagaccactc ttccccttgc ccctcccca      420
gagggacttg actttctttc tggactgttt gtattgaaac aaagtggtgt caaaataaag      480
cccctgcagg gcctggctcc ctgttaaaaa aaaaaaaaaa aaaaaaact cgagggggggg      540
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<210> 290
<211> 1494
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1434)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1439)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1479)

173

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1490)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1491)
<223> n equals a,t,g, or c

<400> 290
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gacaggactg acaacaattt tcctctcacc aagtgacctc agttctctgc caccactggc      60
cttggtggtg gtgggccttg gggtggaggc agaagggcac gtgggtcgtg ttgacagttt     120
tgtattacct gtgttttttt ctttaatagc tatcatggct tgcttaggct gtatgcctgt     180
ttctgaggaa tttatgaagc agttgtcctt tggacaaatc tataactttc ttttcctagc     240
caattatact caaagaacta ggggattata gagargttag gcatattttg ttgggtgtca     300
ggagatgctg aacagagggc ttgtatatct gtacattgct ctttctccac tgtgaggtcc     360
atcctgcctt aatttgggtt cctgcagcct cagggcattc tagggctctc ttagatcctg     420
ctggactgag tcccctctag aaaagaagca ggaacaggct aaccaacagc agactgttag     480
aagttggtgg agggcactga caggagtacc agccagctgt tcagctagga tcctgggtcc     540
ccagagctga cagcctcata ggaacagact tacagtaact cagtgtgagc tggatgcata     600
cttaggtgcc agtgcattcc tttagtgggt gctgccctcc cttcctgagt tgggggcctg     660
agtgagcacc tctgtacagg gcacccctct acagagggag gtagctggta tgtttgtcag     720
tggagacttg cttctccacc tgccacgagg cgggcatcca tccggcagta gactcctagc     780
tcagggtgct cctgtgatgg ctgccttgca acagagagag gatagcccag gaatggcagc     840
tccctccttt ctcaccagtt tccttcttcc gtcctccta ccccaggtgc tcagcaggga     900
gacccccttt cccgctatat cttcaggaag gctggggaga tgctgggcag acacatcgta     960
gcagtgttgc ccgagattga cccggtcttg ttccagggca agattggact ccccatcctg    1020
tgcgtgggct ctgtgtggaa gagctgggag ctgctgaagg aaggtttct tytggcgctg    1080
acccagggca gagagatcca ggctcagaac ttcttctcca gcttcaccct gatgaagctg    1140
aggcactcct ccgctctggg tggggccagc ctaggggcca ggcacatcgg gcacctcctc    1200
cccatggact atagcgccaa tgccattgcc ttctattcct acaccttttc ctaggggct    1260
ggtcccggct ccaccccctc caagctcagt ggacactggg tctgaaagga aggagtcttt    1320
tgcttccttt ctccttttta caaaaacaaa catagaagaa aataaatgca ctttatccac    1380
tccccaaaaa aaaaaaaaaa aaaactcgag gggggcccg gtaacccaat tcgncctana    1440
agtgagtccg tattaaaaat tcattggccg gtcgttttna aaaagtcggn nact          1494
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<210> 291
<211> 1504
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1462)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1480)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1486)
<223> n equals a,t,g, or c

<220>
<221> SITE

<222> (1493)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1494)
<223> n equals a,t,g, or c

<400> 291
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aacataagct ggagctcgcg cgcctgcagg tcgacactag tggatccaaa gaattcggca    60
cgagactagt tctctctctc tctctctctc ttgtaaattg cccagcctca gtcaggtatg   120
tctttatcag cagtgtgaaa acagactaat acatatttgt tccttttttt tctcattatt   180
tatggttgca gtttggtggt tttctttagt gatgttgttt gaatcctttc ttctttgtgt   240
gtctgctcta ccagtgagtt ttatattttc atacattttc atgatggtag atattgttct   300
tttgcttccc aatgtargac tcccttaagc atttcttgta ggaccacaac aaacaagacc   360
caaacaaaca gtcttttgct tatctgggaa atactttttt ccctttatt tatttattta    420
ttttttagc aatggagtct cactctttca cccaggctgg agtacactgg tgtgatcata   480
gctcagtgca gccttgaact cctgggtcaa atgatcctcc tgcctcagcc ttctgagtct   540
ctggaattac agatgtgagc cactgttcca ggctccttca tttgtgaagg atagctttgc   600
tgggtatagt attttttggct tttttttttt tttttttttt aacttgtagt atacatctcc   660
ttttctccta gcctgtaagg tttctgctga gaaatcctgt cagcctgatg gagattctct   720
tataaatgac ttgatgtttt ccccttgctg ttttcagcat tttctctttg tctttcgaca   780
attttaccat aatgtgcctt gragaagacc tttttgagtt gtatttattt ggtaatcttt   840
gagcttcctg trtttggaag ctttcaggaa gttttcagtt attattttat taaataggtt   900
ttctatgcct ttacccatct catctccatc cagaactccc agaatttcag tttttggtca   960
catatgtgtc ccatatgtca tgtagccttg cttcattctt ttttcttttct ttttgtctga  1020
ctgrattatt ttaaaagact attcttcagg ttcagaaatt ctttgttttg cttgatctat  1080
tctattgtta aagctgtcaa ttatcttttg catttctttc aatcatttat tccttccagg  1140
gtttgtgttt ggttctttgt tatgctgcct atctctgttg aatttctcat tcagattatg  1200
tattgttttc ctgatttttt tgtattcatt atgtgtgttc tcttgtatct ccctgagttt  1260
ctttaataac attattctga atttttttca ggcatttcat agattttctt ttcattggaa  1320
tctgttgctg gagaattatt gtgcttcttt ggagatgtta tgcttccttt ttcayatttc  1380
ttycatcctt atgtgcggca craragtacw wmtagagcgg ccgcgggccc atcgattttc  1440
cacccgggtg gggtacgaaa tnagtgtgga agtattcccn ttaaancccc ccnnaagtcc  1500
cggt                                                               1504
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<210> 292
<211> 1759
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (699)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (741)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (777)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1643)
<223> n equals a,t,g, or c

175

<220>
<221> SITE
<222> (1673)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1677)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1726)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1751)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1755)
<223> n equals a,t,g, or c

<400> 292
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gcgggtccgc atcatcgagc cgctgctggt cttcctcctc gcctacgcag cctacctcac        60
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gaagtacgtg gaggccaaca tctcccataa gtcacgcaca actgtcaaat atacaatgaa       180
gactctagcc agctgtgctg agaccgtgat cttcatgctg cttggcatct cagccgtggg       240
actcttctaa gtggggcctg ggattctggg ctggtgctgg gcaacctcat cttcatcctg       300
ttcttccgag ccctcggtat tgctggcacc ctctgctttc ccactctcct tcctgtcccg       360
cccctccctg cagctcatct ccctatstga agtccacatc tttgtcaatt cctaaagcct       420
cctcttgttg ctcacctgtc ccagccctgt wagacctcag cccagatamt tggtcccatc       480
sggtcccamg tcctycactc ccaacgcttt gctcccactg gcctccctcc cgctgtaggc       540
gtagtcctgc agacctgggt gctgaatcag ttccggctag tccctctgga caagattgac       600
caagtggtga tgtcctatgg gggcctgcgg ggggctgtgg cctttgctct cgtcatccta       660
ctggatagga ccaaggtccc tgccaaggac tactttgtng ccaccactat tgtagtggtc       720
ttcttcacag tcatcgtgca nggcttgacc atcaagccac tggtcaaatg gctgaangtg       780
aagaagaatg agcatcacaa acccaccctg aaccaggagc tgcatgaaca cacttttgac       840
cattttctgg ctgcartgga rgacgttgtg gggcrccatg gctaccacta ctggarggac       900
aggtgggarc artttgacaa gaaatacctg agtcagctgc tgatgcgacg atcagcctac       960
cgcatccggg accagatctg ggatgtgtac tacaggctta acatccggga tgccatcagc      1020
tttgtggacc aggtgggcca gcagcttcca ggtgggccag tggtgggtgg gcagatggtc      1080
agcagagcag gacagaaagg ggtggcaagc aggctggccc tgagcaggga gttgggaatt      1140
cctagctggc tccatggtct ggtgaagtgg cagcggcagg aagcagctgg gtctggtgct      1200
gacattcaga gtctggcagg cagtccagag aggtgggaaa cagctggact ctggggtcag      1260
ctcaaccatt atcacttcca agcttgtgac cttgggtaag cacactctct gagcctgttt      1320
ccttagctgt aagaaagcag gcataagagg ctgggcacgg tggctcacgc ctgtaatccc      1380
agcactgtgg gagcctgagg tgggtagatc acttgaggtg aggagtttga gaccagcctg      1440
gcaacatggt gaaaccctgc tctactaaaa atacmaaaac tagccaggca tggtggtgca      1500
tgcctgtaat cccaactact ctggargctk argcaggaga atcgctaaaa tctgggaagc      1560
gggctgggca cggtggctca cacctgtaat cccagcactt tgkggggcca aggcgggtgg      1620
atcatgaggt caggagttcg agnccggcct ggccaacata gtgaaacccc gtntaanact      1680
aaaaatacaa aaactagcca ggcgtggtgg tgggcacctg tagacngggg ggtcttggta      1740
gaaaaaaaac ngggnggaa                                                  1759
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<210> 293
<211> 2406
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> n equals a,t,g, or c

<400> 293

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ttacatctct cacaggagga aagaattcaa gagtctatat gattagttac agagaatatt     120
ttcatcccct ctccctgaat agaaaagcag gggtcaccat ttgtatcctt acccttgagg     180
tgtttttgaa gatgctgtaa ctcttgaagt tgagctgagg cagaaaggtt ggaaaaatgc     240
agccctctgg gwattgtggg gagggatgtg atgtagtaag agggtgtttt gtggtgctag     300
gattcccacg ccaccaactt gcagctttat aasagcgcta ccaagaacca ccrctgggga     360
aaaggttctt attcattgtt tctgttggaa tgtgatcttg ctttctggat tttaggaatt     420
caggttactc agtataaaac tctgagaaat cagtgtgact tagtccttca cctcctaaga     480
taaagtgaat atttctttac aaaataattc atgtccttaa tgttaaagat gtaattttat     540
tttcaaaaca tctataacat gactttcaga agcagttcat ttttccaaga ttcctcacat     600
tatactagat aaataatagg ccctcagtta ataccttca gttattgaat taatctagtt      660
tgtggaatga ggtgtatcct gccaacttcc ctctgctccc aagtacactc tgagaggtaa     720
aatgctctgg gaaatggaac aagaatcgag tggatgctga ctctgtgtgc ccacctcctc     780
aactgattga taatggttga ccttgggcaa gtcacttctt tcaatgcctc agttccccat     840
ctgtcaaatg gggttaataa tactgaccta cctcacaggg gtgttgttgt gaggcattgt     900
aaatcaaagt aatagaata cttcagggtc ctctgtggag gatgtcttga gccagagttt      960
aagcctgaca cacaggcttt ggtcctcact gagctgtctc caagactgga actacttagt    1020
gactcggcaa atttctgcc ccccacccct catcaaagct gctagttcag atgttgacag     1080
tgttttcatg aatgttggaa tcttactagt ccagacttac ttaggatgtt gttggggaag    1140
gcacttggga ttttctgtgt cttgcattca cagagggagg ccatttcaga ttcaagagca    1200
ttggattagg gaatcgtgag gcagggatgc tactgcgtat ttctctctgc aggttgggga    1260
ttaaagttcc tttccccatg ggtttgaagc agactcagac tgtctcagga tcaaagcaac    1320
cctcaatggt tttgatttat gtcattgctt accactcccc aaccaatccc aggacagctg    1380
ggtcactgta cccctttgtg gtatctgtac ctgggcctct ccttcctcat agggaccagc    1440
tgattgaata aatgtgacca ccttatttcc accccccacc cccaaaagct acattggaat    1500
tatttttcct agaaatgtgt ataacactca gaattgggca ttgatcctta aagcttcatc    1560
ccattcaccg tattcaacat ctgtcatctc ttagtgtctg cagtctgaac ctaaccttga    1620
cctttttcc ctctggtttg agaaaacttt ggacactatt tctacttggc caggtgtggg     1680
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tcctggctcc ttgcggtcac attctggttc tctgtgtttt gtggactctg ctctcactgt    1860
tcacccagca ctagcagtac cagatggttc tgtggagtcc tggggaatgg agagagcaca    1920
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cacttcctac aggatgggat ctaagagact caagagctgg gtttctttca gcactctgta    2040
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gaattctcca tggacttta ggtttatggg ggagttttag ctgtgtttct tggtttattt     2160
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tgatgcagac ctcattctct cccctcttc taccctcctc ttttcccct tttcatactc      2340
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aaaaat                                                                2406
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<210> 294
<211> 1377
<212> DNA
<213> Homo sapiens

<400> 294

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gcggaagaca cagaaagaga caaagagaga aatgccttct cctctcttga gttccgtgaa     180
tacaaacact ttccctactc ctctttgcag tcgtagaccc gttgcaggga gattctcagt     240
gccagttgtc tggattttgt gaaggtgctc agggtatata gtgcagtggt tcagaattgg     300
gggtgatttt gcccccctc cccagagaca tttagtgagg tctggagaaa ttttgggggc      360
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tgctacagac atctagtggg tagaggtcag gggtgctatt aaacatgctg caatgcatgg      420
gacacccca aacaaagaac tacctggccc aaaatgtaaa tggtgctgaa atggaggacc      480
cctgatctag ttggaatgga gacagagcat tactggaaca tagtgagttg ccaggtttaa      540
ctcatcttca cataagtacc attgagcacc aactgtatac agaacatagt gccatgcatt      600
tcacagaacg cctggtttaa ggagcttcag tctataatgg gaagaggaaa tgggaaagca      660
gtgcttatcc aggagacact gttggacacc atccatatgt gttctgaacc aacatcacaa      720
cagccatatt atgagacagg catgattcat acccatttta aagataacct gaagcccaaa      780
tcactcaact ataaggtggt agaggaaaga tttaaacctg gagctaagtg attccaccac      840
ccatgttctc atgatgctct tgattaggca gatgaacaaa tatacaaata attatgatac      900
aggacatagt aagagcagtg ctacaagaga gatgcaaata gagcttagag cttagggtgg      960
gattaacaga ctacatagaa gaggtggctt ttgacatgca ttttgggtga gctgtaggat     1020
gaggggaaga agtttcagac atggagatgc atgaatgtat atacacagag aggccacgcg     1080
tggtggttca cacctgtaac cccagcactt tggaaggttg tggagggcag atgacttgag     1140
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aaaattagcc aggtgttgtg gcagtgcctg tagtcccagc tacccagtag gctgaggtgg     1260
gaagatcact tgagcccagg aggtcaagct gcagtgaact gtgatggcat cattgtactc     1320
cagcctgggt gacagagcaa gtgaagaccc tgtctcaaaa aaaaaaaaaa aaaaaaa       1377
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<210> 295
<211> 2043
<212> DNA
<213> Homo sapiens

<400> 295

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ctgccctggc gggggccatg ggggtgatga atgaccctcc aacagcccca catgggttgt      120
ttctgtttct ttggctttc tcgctccgca gtggagggtt tactaggatt taagcttttg      180
agtgcattga gaaccaagac agggcctggc tccaactctg tgggccagag gtgggggact      240
gctaggtcga gtctgcagct tcgccagttt cttggttggg acactcctct ggcagcccca      300
gcaccaccac aacccttgc agtgtgcccc agtcccctgg attcgctgga ctgcaaaaag      360
gagcaccagg gaaagctcag caaaggctca ggaggcctcc cgggtcctcg ggagatgaag      420
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cattggagaa gcgaggggcg gggcgtcaaa ggcactgctt caggacgcgc ttgctgaaac      540
gactccaaca gctagttcac agcccagctt gtacgttggt taccatagct actgctgtca      600
ctgtagctgc tcccgtaggg tcgttgattc ctgaacgtat cacatctcac ctgccccctt      660
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<212> DNA
<213> Homo sapiens

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180

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<212> DNA
<213> Homo sapiens

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<212> DNA
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181

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<211> 2520
<212> DNA
<213> Homo sapiens

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182

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<211> 968
<212> DNA
<213> Homo sapiens


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gtggttctag cagatcctag gcaagctgga atagattctc ttctccgaaa gatttatgag    540
atttactcag actttgccct caagaatcca ttctattcct tagaaatgcc tatcaggtgt    600
gagctctttg accagaacct gaagctagct ctggaggtgg cagagaaggc tggaactttt    660
ggacctgggt cataggctga acctgttatg gaccccccaaa ttctgagagt tcctgcaaca    720
agaatactgc tgttgacact ccagtggaaa tcccagcagc cttgttagtg cacttgaaag    780
tgggagaatg ctgaccctga tgacttgtac tgattcctga gccttaacac tgtgctcttt    840
ccttctgtat ataccatggt cttactttcc aactctgtac agatttattt atggaggagc    900
taggtccata aatgttgtaa taaatattcc tttgatcttg gtgtttgcaa aaaaaaaaaa    960
aaaaaaaa                                                             968


<210> 303
<211> 1235
<212> DNA
<213> Homo sapiens


<400> 303
ggcacgagca aggctgtcag gttgttttgg gggaagaggg ggtcatggat ggctgagcag     60
agagcgggga aaatgcaggc tgagtggggc gacctcctgc ctgccaggag cccccttca    120
ggacacagcg ggggtctcac acttgctgtc cccatccatg gcccgagggg gaacctggtg    180
gtctcttctg agcttttgga cttgggggatg ccaaacacgt gctcaccctc acactcgccc    240
cggcccgctg cgcccctaat tgccaaaggg tagggaaatg gcgaagccag ccaccaggtc    300
gctggtgaca gggccagggt tatgcaggaa ggtggtgcgg cattgccttc cacatatgta    360
agtctctggg cggcgccctc ccagctccct gcctctgttt ccccatgtgg gccgtgggga    420
actcccagag ctacctcttg ggggagcgtg gtggcagcga tgatggggag acgcctggaa    480
gctcacagaa cttgggtctg gctggctcct gcccgtgacg ccttgcccag cagcaaggtg    540
cgcaacatgg ctgccagccc cgcctcccac ccccacccccg agtcctgagc tcactttcgc    600
cttctccatc ccctgccgtg ggggccacag ccacacctca ccgcccagtc cagctgtctc    660
cagaaggggga caggcagtcc gcggtctctg dacaatcaac tcaaggtacg cccactgcaa    720
ggcctccctc ccaccgcggc ccctgcctgg ccacctggcc tctctgcacc agggtgacaa    780
ggggtctcgt ctgccccttta atgctccagg gcccagtcct aaggagctga gggtctgagg    840
acgcagggag ggtggaggtg tcctgaggct gatggacagt gaccgccact ggcccccaac    900
atgaccacac gtgggtgctg aactcggggc gccgtgccca ccggcatggt cctcccgagc    960
tccgacagca ttacctcacc cggccccatc tgttgccccg gtccagccct gatggcgcgc   1020
gcctggtctg tctgattccc ctagccgcca ccccacgttt ctgtaccggg tctctgcagt   1080
gttaaacgga cgtgtaaata gtggtaaata gtgaaagcct gtccttccct aaatgtaaag   1140
ccatctgtcc ggcgtaagga cgacaccgtc agctgtccga ctcgcacaca tttaataaac   1200
tgagctcttg cattgccaaa aaaaaaaaaa aaaaa                               1235


<210> 304
<211> 2311
<212> DNA
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<213> Homo sapiens

<220>
<221> SITE
<222> (2301)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2311)
<223> n equals a,t,g, or c

<400> 304
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catacgcaag tcacatgacc atttaaatgt gcaaatgtaa gaagattcaa tgtgtttaca    60
tcaaatgaca tattttattg atttattgca gattcagtgc atatgagcca aattgttgag   120
tgtgtaagag ctatattgtg tattttatta aattaatata tagttgtgtt gcaaaaatat   180
ttgggcttat attgtaaatg gcaagtgttg ccttggtagc tgtcgaactc tatgagtttt   240
gtttttttcct gcttcctttt ccccatggag tgtgggaagc agtgcctcag agcaaagtct   300
cttgtttaat gtatagtcta ccaagtacta cagtacataa tctgttcaaa atgtgtttga   360
gtgagctgat ggagctaact gaaaggtcaa aaattacatc catcagtcat ggttatgtgc   420
aagtccttgt agaagctttt attaaagtca tgctaaatca caagaattga catttgtacc   480
aatatctgaa acttcttcat gttttttcaa taacatacag cttctgcctg tgtagatatt   540
atgccatcag ttggttctca aaagtatttt aagtgcttca gatgtgtgtt cccattatat   600
tttgaaaaca tgaaaaatgc tttaatgcat gtatgtacca gcagtggtta cttgcattgt   660
gtagtgtttt tcaagaggtc tgggtcttaa caaaatgttt tcctttatct cagtgctctt   720
ctgcctcttt ttgttggtgt cctttgagaa caatacacct tctattcctt catttggtta   780
caccttttcct tgtgacattt agcgagtttc aaacttactt ccatatgagg ctaagaaacc   840
tcaaatttca ggaattggga aaaataaaat tagcacttgc agaagtagca gcagatggga   900
aaatgccttg attgacattt tctttcagca tttaaaattt ttggcatttt acagcttcat   960
gacaaacagt tttgtgccca taccttagaa aatgtggtgc tgagttaaat aaaggctgtt  1020
tgagcactgg agcagaaaaa tgcattattt gcaaactggt ggataatttt gtgccttctc  1080
ttctggccac caagccagtg tagaaacagc aaaaatgtca taaaaattct tatatttaaa  1140
acaaaaacaa aagcaaaaac aaacattgaa ttaaattaag ttttgtaatt ttaaacttta  1200
aaaacttcta ctgaaaatat ttccgccaaa tgccatcaat attttagact gtacctcgtt  1260
tgcaaaactg ctttgagagg gaagagtgga caactcccat cagccttatt ctcttgagaa  1320
ctatattttg gttcctagta acagcctttc caaagctcta ctcttggttt ttattactca  1380
taaatgttta aattagaaaa gaagggacct tgtacatgtg aaacctaatt gactctctat  1440
attttggaca atttatgtat ctgaaatgtg ttgtctctgt tatatgatgt tattttttgcc  1500
aggagactac aggttgattt agcttgatag ctgaaatttg atggaaaact gatttccatt  1560
tagtcttacc aagtgttgct tctctcttac tagacagata tccacttagt aaaatctaaa  1620
gcagtatgta aatgaaacca gcaaagagag tagggtttat tttataaaca ttcttaatgc  1680
taagtaacca gttgttcaat ttattatatg tgtctgagga cattaaaaca ccataagrtt  1740
gtaataattg gttgtgccaa tgtgtgaggg atttaccttt aggctctctg tcaccagtga  1800
tttactagtg ttagctgttt aacacattat ctgtatttag tagtgattat ttatttacaa  1860
gttggtggta attcagcagt caggactcta agctttttata gttgaattga ggaaatctcg  1920
cttttattca tttagctggc aactgccttt attgcagacc tctggtgctt ggctttcaag  1980
gaagcctatg agatgccaaa atcacacctt tagagagcac cttgctctaa taggtgatgc  2040
atgagcaaac agtgagattt gaaggggttt taacataatt tagaatgtga aaaaaatatc  2100
aattcatatc tttcaagtac taacccctca aaaaagccca cacatacaaa atatgtgatg  2160
tgataccact ttgtctttta ggtctttaag taactgaagt taagcacaga aaaaaaaatc  2220
acttcatgga aatttcagta agaaacccaa acttctaaaa attgcttgca gatgagctaa  2280
aaaaaaaaaa aaaaaaaaaa nctcgggggt n                                 2311
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<210> 305
<211> 2311
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2301)

<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2311)
<223> n equals a,t,g, or c

<400> 305
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catacgcaag tcacatgacc atttaaatgt gcaaatgtaa gaagattcaa tgtgtttaca      60
tcaaatgaca tattttattg atttattgca gattcagtgc atatgagcca aattgttgag     120
tgtgtaagag ctatattgtg tatttтatta aattaatata tagttgtgtt gcaaaaatat     180
ttgggcttat attgtaaatg gcaagtgttg ccttggtagc tgtcgaactc tatgagtttt     240
gttttttcct gcttcctttt ccccatggag tgtgggaagc agtgcctcag agcaaagtct     300
cttgtttaat gtatagtcta ccaagtacta cagtacataa tctgttcaaa atgtgtttga     360
gtgagctgat ggagctaact gaaaggtcaa aaattacatc catcagtcat ggttatgtgc     420
aagtccttgt agaagctttt attaaagtca tgctaaatca caagaattga catttgtacc     480
aatatctgaa acttcttcat gttttttcaa taacatacag cttctgcctg tgtagatatt     540
atgccatcag ttggttctca aaagtatttt aagtgcttca gatgtgtgtt cccattatat     600
tttgaaaaca tgaaaaatgc tttaatgcat gtatgtacca gcagtggtta cttgcattgt     660
gtagtgtttt tcaagaggtc tgggtcttaa caaaatgttt tcctttatct cagtgctctt     720
ctgcctcttt ttgttggtgt cctttgagaa caatacacct tctattcctt catttggtta     780
cacctttcct tgtgacattt agcgagtttc aaacttactt ccatatgagg ctaagaaacc     840
tcaaatttca ggaattggga aaaataaaat tagcacttgc agaagtagca gcagatggga     900
aaatgccttg attgacattt tctttcagca tttaaaattt ttggcatttt acagcttcat     960
gacaaacagt tttgtgccca taccttagaa aatgtggtgc tgagttaaat aaaggctgtt    1020
tgagcactgg agcagaaaaa tgcattattt gcaaactggt ggataatttt gtgccttctc    1080
ttctggccac caagccagtg tagaaacagc aaaaatgtca taaaaattct tatatttaaa    1140
acaaaaacaa aagcaaaaac aaacattgaa ttaaattaag ttttgtaatt ttaaactttta    1200
aaaacttcta ctgaaaatat ttccgccaaa tgccatcaat attttagact gtacctcgtt    1260
tgcaaaactg ctttgagagg gaagagtgga caactcccat cagccttatt ctcttgagaa    1320
ctatattttg gttcctagta acagcctttc caaagctcta ctcttggttt ttattactca    1380
taaatgttta aattagaaaa gaagggacct tgtacatgtg aaacctaatt gactctctat    1440
attttggaca atttatgtat ctgaaatgtg ttgtctctgt tatatgatgt tattttttgcc    1500
aggagactac aggttgattt agcttgatag ctgaaatttg atggaaaact gatttccatt    1560
tagtcttacc aagtgttgct tctctcttac tagacagata tccacttagt aaaatctaaa    1620
gcagtatgta aatgaaacca gcaaagagag tagggtttat tttataaaca ttcttaatgc    1680
taagtaacca gttgttcaat ttattatatg tgtctgagga cattaaaaca ccataagrtt    1740
gtaataattg gttgtgccaa tgtgtgaggg atttaccttt aggctctctg tcaccagtga    1800
tttactagtg ttagctgttt aacacattat ctgtatttag tagtgattat ttatttacaa    1860
gttggtggta attcagcagt caggactcta agctttтata gttgaattga ggaaatctcg    1920
cttttattca tttagctggc aactgccttt attgcagacc tctggtgctt ggctttcaag    1980
gaagcctatg agatgccaaa atcacacctt tagagagcac cttgctctaa taggtgatgc    2040
atgagcaaac agtgagattt gaaggggttt aacataatt tagaatgtga aaaaaatatc    2100
aattcatatc tttcaagtac taaccсctca aaaagсcca cacatacaaa atatgtgatg    2160
tgataccact ttgtctttta ggtctttaag taactgaagt taagcacaga aaaaaaaatc    2220
acttcatgga aatttcagta agaaacccaa acttctaaaa attgcttgca gatgagctaa    2280
aaaaaaaaaa aaaaaaaaaa nctcgggggt n                                   2311
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<210> 306
<211> 1057
<212> DNA
<213> Homo sapiens

<400> 306
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ggcacaggat gaggacaact gtgctgacaa cccatgttct tgcagccagt ctcactgttg      60
tacacgatgg tcagccatgg gtgtcatgtc cctcttttg ccttgtttat ggtgttacct     120
tccagccaag ggttgcctta aattgtgcca ggggtgttat gaccgggtta acaggcctgg     180
ttgccgctgt aaaaactcaa acacagtttg ctgcaaagtt cccactgtcc ccctaggaa     240
ctttgaaaaa ccaacatagc atcattaatc aggaatatta cagtaatgag gatttттtct     300
gtcttttttt aatacacata tgcaaccaac taaacagtta taatcttggc actgttaata     360
gaaagttggg gatagtcytt gctgtttgcg gtgaaatgct ttttgtccat gtgccgtttt     420
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185

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aactgatatg cttgttagaa ctcagctaat ggagctcaaa gtatgagata cagaacttgg    480
tgacccatgt attgcataag ctaaagcaac acagacactc ctaggcaaag ttttgtttg    540
tgaatagtac ttgcaaaact tgtaaattag cagatgactt ttttccattg ttttctccag    600
agagaatgtg ctatattttt gtatatacaa taatatttgc aactgtgaaa aacaagttgt    660
gccatactac atggcacaga cacaaaatat tatactaata tgttgtacat tcggaagaat    720
gtgaatcaat cagtatgttt ttagattgta ttttgcctta cagaaagcct ttattgtaag    780
actctgattt ccctttggac ttcatgtata ttgtacagtt acagtaaaat tcaaccttta    840
ttttctaatt ttttcaacat attgtttagt gtaaagaata tttatttgaa gttttattat    900
tttataaaaa agaatattta ttttaagagg catcttacaa attttgcccc ttttatgagg    960
atgtgatagt tgctgcaaat gaagggttac agatgcatat gtccaatata aaatagaaaa   1020
tatattaacg tttgaaatta aaaaaaaaaa aaaaaaa                            1057

<210> 307
<211> 1948
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1913)
<223> n equals a,t,g, or c

<400> 307
ggcacgagct cgtgccgttt aaatgagaag tactgacttt gtaattaaaa acaaaaacta     60
ttttaaaatg tgctaaattt tggacctatc tcagcctgag aaggtttttt tctaaaaagg    120
ttcaggcatc tttttatttt cctactgctc tccttacctg tgcacacctc attgcctgta    180
tctgtgatgc ctctatttgg agggaacctg ggttatgcct gggcctggtt tactcccata    240
acatgggttg ctgtacttgc ccacttaatt gtgagctcta tccatccagg aaagtaatct    300
gttccttatt ttgaatagcg tgttcttaga agttcatggg ttctaattga aggaaactag    360
agggaccccT tccatccttc agcaagggtc cccaaagata ggcagggtgc ccagagaatg    420
cctcaactgc tgagaactcc acccttTcag gtccaatgca ggctcatctc cagaaaagct    480
gggttagagt tgtctcactg tttgggttgg aatattgtga tttctaggag tggaaatgca    540
cttgctaatt tagctatctc ctctttataa gacgctcatg gaaataaaga ttagccataa    600
aataccttta atgagcttcc aaatttTatc tgcaaggaac ccagggcctg tggcattata    660
ctggtttgta gaagactcct gtggtgtctg cagaaacttt ctctggtgaa tatctagaat    720
ttccattact ttgaatgtgt acatgttatt aatcaaggaa ttaatcatcc ccattctctt    780
tgattgaaag tcacattacc ttggaaggac aaggtgttgt caaatgggca aggcagatca    840
tatgttttct tttactggac tccttatttt tctaattaca gcctgtgtat cctgtgctag    900
agagcctctt gaaattaact taatttacta tcacacttgt aacataccca tttatttggg    960
cctgtgaata tgtgtgcact ccatttgatt acatctaatg ttctccctaa ataaagagta   1020
caattaattc attagaggat ggtttgtttc caggggtaag tgccagttta tgatgattcc   1080
atcaacactt gcaccacatt aatttatttc caatttaatc agtgtttaaa ttgaactggg   1140
atcaggcaga acaaaacaca tggttttgca taattataat ggagcaaatg gaaatagtca   1200
tagcacttca gcattagaaa cctcactgca gaagcacaga tgggttagga gatgttgatt   1260
aaaaaagatg tctaggaata aatcctctgt aagcactgta ttaaaatcca agtgcctgca   1320
ggacaagcga ctttgcatta attactaaaa aatttcttat tctgggtata gctttctgta   1380
gaaatcctac agattgagta aactgtggag gcactccttt tcatgctcca tttaacttaa   1440
attattagct ggttcagaaa gttgtttctt cccagacttg tctaggaagt tcaatatta   1500
gcaattaccc ctttgtgctt ctcgaacctt ctccaagcca gtgtcgttga aggacagatt   1560
tgccatgtgg gaaggtgggc taccttggaa aacagatttt tggttcggag cttgtctgaa   1620
actctctaga ttaagaattg tggccgggcg cagtggctcg cgcctgtaat cccagcactt   1680
tgggagaccg aggtgggcgg atcacctgag gttgggagtt cgagaccagc ctgaccaaca   1740
tggagaaacc ccatctctac taaaaatagg aaattagctg ggtgtggtgg cacatgcctg   1800
taatcccagc tactcgggag gctgaggcag gagaatcact ggaacccagg aggcagagat   1860
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ctcaaaaaaa aaaaaaaaaa aaaaaaac                                      1948

<210> 308
<211> 622
<212> DNA
<213> Homo sapiens
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186

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (33)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (34)
<223> n equals a,t,g, or c

<400> 308
ttccngctcg tataaaantg ganttgtgag cgnntaacat tttcacacag gaaacagcta   60
tgaccttgat tacgccaagc tcgaaattaa ccctcactaa agggaacaaa agctggagct   120
cgcgcgcctg caggtcgaca ctagtggatc caaagaattc ggcacgagct cgtgccgcgc   180
ccgttcaacg tccggagcat cggtgcagtt tcgagggtaa agcctttggc gcggtgatgt   240
ggacttttgt tctctaacta caactcccag catacgtcac ccctcacgtg ggcgctaggt   300
caccagtgaa aagttgtgca gagcccaaca tgagcttcat ttccaagctg ccacctatct   360
ctgcctcctg cgtagcatcc ggaaacatgt ggccctacat caggaatttc atggcaaggg   420
tgagcgctcg gtggaggagt ctgctggctt ggtgggtctc aagttgcccc atcagcctgg   480
agggaagggc tgggagccat gaacatggag aatatccttg gatgctgcat tcataggaga   540
attgaataat ttctatcaat atgtatttat cattaaattt tttttaagtt taaaaaaaaa   600
aaaaaaaaaa aaaaaaaaaa aa   622

<210> 309
<211> 1647
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (89)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (170)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (603)
<223> n equals a,t,g, or c

<220>
<221> SITE

<222> (751)
<223> n equals a,t,g, or c

<400> 309
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gatcactacc aattttcctg ttttggggtg taatgaaaat tttaggctgt gccccaattt      60
ttagtttctt acgactatct ttgattttng ataggcatct tggagtagtt ttttgaattt     120
ttgactcatt aattttcaga agggtgtcta gactatttac actataagtn gttcatttac     180
ctgagagtct aaacattata agttatcaaa caaaagattt atatgctggt cattccgttt     240
ctaaatcaaa tggtaatact tgaagaattt ttgctttaat ggaaggcagc ttgtgtgaca     300
gtgcgatctt aaaagtgtgc agatcccagt ctcagtcaat caatgtgggc tgattgctgt     360
ggattgtaat agacagtcac atcatagcaa tcttgcagat aacgtttgct gctgtttatt     420
gtcagcttta gcttctgcta ttttatttaa ataatattat cttatttctc cctatctttt     480
tttctcccct tttcctttct tcatttctcc ctatctttaa cttaacctgt cttctccctt     540
ttccacttcc attttttttg ttattttctt gataatgtag aaatattatg acatttatat     600
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aagctttgac tgtttttctt tcttttatag ncatcttagt caaatttgta atcgtttcct     780
taatggaatg gggtgttcaa aggccagtgt ttatggaaac tgactaggta acatatatag     840
tgaaattagc ctgaatttgg ggggtagagt tggactctgg tcgggtagag tacaggcact     900
tcttctaaag ggacagctgc atcagtggat tgttgtcata tggaaaaatg ggcccaaaat     960
tctcaggtct gctcatagtt cagtagaagc tggagtggcy atgtgatgtc tctgaagtgg    1020
tggcagctaa tagtttttwr ggcacctaac tcaaagcttt aaaaacacag ccaaacaaaa    1080
ggtgtctgag ctattacttt tcaccttctt tatagattct acatkkggtg caagtttatt    1140
taatcctaag gtttttaaaa tttattcaac tacatgctga cacagttttg tttttttgaa    1200
aaacaattaa atctgtaatc tgtctggtac ttacttttca atgtgtgaag tggagtcctg    1260
ttttgggttt tttttcctct attttatttt agcatatttt tctccccaac cttggcttcc    1320
tttaaaaagc catacttggg ccaggctcgg tggctcaagt ctgtaatccc agcactttga    1380
gaggccaagg cgggtggatc acttgaggtc gggagttcga gactagcctg gccaacgtgg    1440
cgaaactccg tctctactaa aaatacaaaa aattagccag gtgtggtggt gagcacctgc    1500
aatcccagct acttgggagg ctgaggcagg agaattgctt gaaaacccgg gaggcggagc    1560
ttgcagtgag ccgagatcgc gccaccacac tccagcctgg gcgacacagt gagacattgt    1620
ctcaaaaaaa aaaaaaaaaa actcgag                                        1647
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<210> 310
<211> 598
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (550)
<223> n equals a,t,g, or c

<400> 310
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tccaaagatt cggcacagat tgcaggtaag tgcagtggca taagcagaag gaagggaagg      60
acatatttgg gcacagtcat tctgctacca ccaaaagcat ctgcctattg gtgaactttc     120
cacatggctt ttctttcatt ttgctgctgc gcctttgctt tgtattattg gagctcagcc     180
ttctcccttt ctattgtttt tttttttctt tatcgtatat acacacctaa gttttttccat    240
cttgcatctt cccacaatct cacttctccc tctggctcct gccccgtctt tctccttttg     300
ttcatactca gtctcaaagg aagagtctat agtcactatc tccacttctc cacctgccat     360
ttagctttcc accctctgca gccagaattt gaccctcaga actccactga aactactctg     420
tcaaaagcta caaattattg cctaattgtc aaagtcaatg ggttattttt catattcatc     480
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<210> 311
<211> 1467
<212> DNA
<213> Homo sapiens

<400> 311

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aggtctgcgt tggaatctcc tagaaaagtt gtgattttcg agccatatcc ttctgtggta     360
gatcctaatg atcctcagat gttggccttc aaccccagga aaaagaacta tgatcgagta     420
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<210> 312
<211> 1551
<212> DNA
<213> Homo sapiens

<400> 312

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attttgtat ttttagtaga gacggggttt caccgtgttg gccggactgg tctccaactc     660
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<210> 313
<211> 1252

<212> DNA
<213> Homo sapiens

<400> 313
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<210> 314
<211> 2516
<212> DNA
<213> Homo sapiens

<400> 314
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<210> 315
<211> 2483
<212> DNA
<213> Homo sapiens

<400> 315

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gccttttttc ttagttttta tcttgttatt tatactttta ttgatacatg atagctatac     180
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191

aaaaaaaaaa aaaaaaaaaa aaa   2483

<210> 316
<211> 1663
<212> DNA
<213> Homo sapiens

<400> 316
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<210> 317
<211> 1531
<212> DNA
<213> Homo sapiens

<400> 317
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192

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<211> 223
<212> DNA
<213> Homo sapiens

<400> 318
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gaccttcctg gaggaggtgg gcagctcaga ctccacatgc tggtggtgcc tgaggtctga       180
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<210> 319
<211> 2015
<212> DNA
<213> Homo sapiens

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taaatccacc agggaatgtg caagatgttt aatctgccat tccttttgtt ggtctcagtt       120
gctttatggt gcaagcaact gaaaacattg aatgtttata ctataaggcc tcgaaggcaa       180
atgaaatact tcttttaggg ctcaactgaa gaattagtaa ttttttcccaa ttgtggagga      240
tttctaaata tttgtcagta ttaagctaaa attaatgagt gaaaaaatgt atacagtctt       300
tacttcactt ttaatttatg ggatatgtac tttattacat cattttaat aatatgaaat       360
aatttaaaca catagataat atacaacgta tacgatgtat aaagagtagt gaaaggaacc       420
acccaggtta tgaagaagaa gatctctaat attatcaaag ccccaagaat agttttctc       480
tattcaatca cttaccttga tccccagggt agcatcaatc tgactttgtt gcttcccatt      540
gtcttttttt aataggttta tatacatata tgtatatctc tttaacaatt tctttaatta      600
taagtgtttt tacttttaca aaattggtat cttatatatg gttttcatac ttgcctttt      660
tactcaatat tgggtgtctg agattcctcc aggttttaa tcagttttcc taagataaat      720
attttgaagt tgttttcagc ttttcactat tgtaaacaat gctgcactgg atattcttat      780
tcatgtttcc tgatagacat atgcaaaagt ttctttaggc aagggattat tggtccataa      840
ggtatgcacc tgtgtaactt tattccaaaa tgccaaaatg cctttaaaag aattttgatt      900
acactcttgc catctttta tgacagttct acttcctcca ttcctcgcca atagttggta      960
ttgtccatta tttttatttta cttttaaatt ttattttata ttatactttt gtcaatgtag     1020
tgagtgtaaa gtaatatttc attatgtgtt tagctcagaa gtacaactgc cggattgcag     1080
gatatactaa atagttttcc aaggcttcct ttaccaccct ctgctcctgt atctaatttc     1140
cgctctacaa tgagggtaaa attatatccc attgtggttt taatttgcat cttcatgatt     1200
accagtgagg agcttttcat gtattattta gctattcatg tttcctttca tgtagaataa     1260
ctgctcttgt ttttgcctat atttatagaa gtttttgtat gttctgaata atctttttta     1320
ggtcatatgt gtggcacata ttttatccta gtttttgtct tctctttta tttgcaatgt      1380
attgtcttat gataagcaaa agtttataat tttaatgcat agagctttta atataattgt     1440
tttcacattt tctgatgtgc ttaagaaatc ctcaatgctg tggtcatgaa gttattctca     1500
ttttttttcc taaaaaattt aaggagttgt ttttcacatt tcagtgttta tttggagaat     1560
gtgtgtgtat gtgtgagcag gtgtgtggta ggaggcagga atccaatttc cctttttcca     1620
acatgagtcc tagtacccct tgtcaaatat gccccattaa tgtgcaatga caactctgtc     1680
gtatatgagt tgccatatgt gtttgggtgt gtctgagttc ccaaatcaat tccatttgtc     1740
tttttcttcc atatccataa taatgtgccg ttttcattat tacaacttta ttataggtct     1800
taatatacag aatgggcaag tcacactact tgttcatcag gaaatcttaa ctattttcct     1860
tttatcttcc atatgaatat tggaatgagc tcactaattt ccatgccaac attgtgactg     1920
gaattacatt gagactaaag atcaatttgg gaagaaatgc catccttata ataatatatc     1980
aataaatcct taatattaaa aaaaaaaaa aaaaa                                 2015
```

<210> 320
<211> 1964
<212> DNA
<213> Homo sapiens

<400> 320
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ggctgcagga attcgggccg aagcttagaa tgactaattt ggtcataagt tttacactta      60
gattttcttc tttcccagtg ttgccctttt gccttctttt atgtaacata gcatttgggt     120
taaataatac cttttcttag tagaaacaca catgattatc tgtagtgaat gtaatttaat     180
ttgtaaactc cttttgtgcg gcattcctgc aggactgtgc actgtgacat ggttttctat     240
tcatcaatcc cttgccttgt atttttcaag tgttggttga accaattctt acaagtgaat     300
tattcaccc tcccttgcag ctcaaaacaa acaaaaaagt tctcctttcc aagttgaaac     360
ctataatttg atcagtttgc ataaagtagt tacagctatt ctcttcctta gtgtcatcta     420
ttgagagtac accttaggga aagaagttct ggagaatgag ctgctcctgt cctcacggta     480
gagatagaaa ggtctgctca atgtctccaa tgccctctaa tattctgaac agtaataacc     540
ttaaagatat taagataccc cacttgacca tgccccttgg gggtcctctc catcagtgct     600
atctttctgt gaagatagag atgttctata atctgcaagt ccattgtggt aaccagtagc     660
cacatgtggc ttttgagcac ttgaaatgta gggtaatgca atagggggac tgattttaac     720
ttttatttaa tgttaagtaa tttaaatgta tatagccaca tgtggctaat ggttaccaca     780
tcaaacagca tagctctaga cagttgtgtg gttctgaaga atctcaatgk tcaaaaaaaa     840
aaacattgac ctctcttacc ctcatatttt attacaaaca ccctgagtaa attagtattg     900
aagacttggc tgtcgaggca ctctggtttg tgaaaggtg ggatttggag tcacaggcct     960
tgggtttagt tctagcccta ccaatcactg atcgggtggc ctgggcacac attgtcccct    1020
cacatcagtt tcctcatata taaagtagaa atgatggcac ctatctccta aggctattgk    1080
gaagatgaaa tgaaacaaca cgtgtaaggc actgagtgta ccctgtctaa attatgctgg    1140
tctgtgtcca catctgactc aggcagagat ttctcagttt tccttatgtt taaaaaataa    1200
acaaataaca gatcatctct gaagccaagc atgtttccaa agagaactct gaaaatcagc    1260
tttattattt taatcctgtg ctgtctgtga ctgtctccag atgtgtgtct gtggagaaat    1320
agatcttcat aagtctgaga aaggtattta gtctgtccga aaatgtgttt ctaagtatac    1380
tcatctataa ttttattact gacatcttac tagtaccact aacaagtaaa gggaagttag    1440
tttaacataa agattattga tattgtttcc tgagctatca gtgttacttc atttaattgg    1500
atagagaggc ttacttttct agattatctt tgtaattgtt tacttccctt taatgtgtct    1560
atgctatggt agagaataat ggaaggcatt accatgctac tccattttca tttggcctat    1620
gaagactggc acagtaaggg ctttatagaa atggaagttg tagaaaattg aaagtttaaa    1680
cttattaagc atcaggacat taactttaac tgctttttaa atagaaatat tcctgaaatg    1740
tagaatgttt ttgtaaatta gaagtgtttt accagcctcc taaaaaatct gttgtttgaa    1800
aacttgggtc ataaaagaga taaaatctta agtgcagagt taagcatcac aagaccagat    1860
tgacttctag tacctggtgc atcaaacaaa aattctgata ttggcagcct gggcaacata    1920
gtagaacttc ttcccccaca aaaaaaaaaa aaaaaaaact cgag                     1964
```

<210> 321
<211> 1650
<212> DNA
<213> Homo sapiens

<400> 321
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ggcacgaggt tcctgctccg cttgaggaga agcgccaagt gcgcatgggg acgctatagc      60
aattcgtttg ctgtccttcc tctccttcga agatgacaag gcctaccatc gtttcttcct     120
gcctttgggc cgtcaggcag ttggttggga cccgctccaa ccctcggttc ttcctgcaat     180
acagtggata caatttgtca tggctactct gagtgttata ggttcaagtt cacttattgc     240
ctatgctgta ttccataata tacagaaatc tccagagata agaccacttt tttatctgag     300
cttctgtgac ctgctcctgg gactttgctg gctcacggag acacttctct atggagcttc     360
agtagcaaat aaggacatca tctgctataa cctacaagca gttggacagg ggagacgggg     420
tttcgccatg tttgccaggc tggtcctgaa tgcctgacct caagtgattc accgcttggg     480
cctcccaaag tgctgggatt acaggtgtga gccactgcac ctggcctcct taaatgtatc     540
tttatggcct aattttcacc tttgcaccca gttgatattc tacatttcct catttctcta     600
caccgtcaat tacatctggt atttgtacac agagctgagg atgaaacaca cccagagtgg     660
acagagcaca tctccactgg tgatagatta tacttgtcga gttggtcaaa tggcctttgt     720
tttctcaagc ctgatacctc tgctattgat gacacctgta ttctgtctgg gaaatactag     780
tgaatgtttc caaaacttca gtcagagcca caagtcttac ttatccgagc ccagacattg     840
tataagaagt ttgtgaagtc aactggcttt ctggggagtg aacagtgggc agtgattcac     900
```

```
attgtggacc aacgggtgcg cttctaccca gtggccttct tttgctgctg gggcccagac    960
gtgtgtggag gaacctgata cttcagacag tcagggctga caagaaggtt tacactttgt   1020
gtattcacag ctgtcattct aatgatcata aagctgacta agccacagga caccaagctt   1080
cacatggccc tttatgttct ccaggctcta acggcaacat ctcagggtct actcaactgt   1140
ggagtatatg gctggacgca gcacaaattc caccaactaa agcaggaggc tcggcgtgat   1200
gcagataccc agacaccatt attatgctca cagaagagat tctatagcag gggcttaaat   1260
tcactggaat ccaccctgac ttttcctgcc agtacttcta ccatttttg aaactacaat    1320
actggaacat ccaggaactg gagttattct acgctaatgg attggaaaga atgttgggaa   1380
aggacatctt aaatctttc taactatgcc ctaaactgca gaactcaaag gaaatatagt     1440
gccattgtta gtagtcattc tagatgaatt gggagtatct ctccagttat tcccagattc   1500
actagtgatc cttaaagtct ctattcaggg agaggaagac actttccatc tcagagatag   1560
actcgtgtta ccttgatgga tattggattt gtctaagtct cttctagaaa aaataaattc   1620
tagattatta aaaaaaaaaa aaaaaaaaa                                      1650

<210> 322
<211> 924
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (924)
<223> n equals a,t,g, or c

<400> 322
gctgaccagg aactgctgag aaggaaggga agaggggctt gaagcagagc atccagcgag     60
aaacctggcc tggactggga tccgggaagg cttcctggag gaggtggcag gagccaggat    120
ctgaatggtc accgacgatg agggcgcacc tgctgtcctg gagcttccga tctctgttcg    180
gggaccctgt garccttctg gccggctgcg tgcagagccc actgggcacg gtggtcggcc    240
tggtgtgagg ccccccgggg accggcagtg tgtccaggga ggggatggcc tkagcccagc    300
ggctcctccc gctgagtgta tttcttccca ccactcagcg catggctgcc ctggctcacg    360
aggcagtcgg gactcgtgac ttgctggctg ctggctgctg ctgcctcgcg cgctgggggtt   420
ccatggagga actgggcctg ccgccccggc ctgcacctgc tgcccgcatg ctggggtccc    480
atggaggaac caggcctggc gccccggcct cgcccagcgg ctggtgtggg cagctgttcc    540
ctgcctcgca gtgtcctgga ggcagctgtc tcgcagactc agcttggtct cccgcaggct    600
tcagaaaaac ccaattgcac gtgtgggatt cttccccagc ccttgggtgc ggggtctctg    660
tgcacttgag agctggggga cccacccacc gtctcccact ccaagttcat cccagagcgt    720
gggcccgctg ggcacctggc acctggcctg cagatgctgc tacgagtgac cagtgctgtg    780
tggaggagcc aagggcggcc cctgggaaac cgggcttcaa cagtacaagg aaaagaaact    840
tgctctgttt tgtaagagcg tgttcctttt cctctttttt gtcactttaa agaccaaaaa    900
gaataaagaa agaaagaaa aaan                                            924

<210> 323
<211> 1015
<212> DNA
<213> Homo sapiens

<400> 323
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ccccgggctg yaggaattcg gcacgagctg accaggaact gctgagaagg aagggaagag    120
gggcttgaag cagagcatcc agcgagaaac ctggcctgga ctgggatccg ggaaggcttc    180
ctggaggagg tggcaggagc caggatctga atggtcaccg acgatgaggg cgcacctgct    240
gtcctggagc ttccgatctc tgttcgggga ccctgtgagc cttctggccg gctgcgtgca    300
gagcccactg ggcacggtgg tcggcctggt gtgaggcccc cggggaccg gcagtgtgtc     360
agggaggga tggcctkagc ccarcggytc ytcccgytra gtgwatttct tcccaccact    420
cagcgcatgg ytgccctggc tcacgaggca gtcgggactc gtgacttgct ggctgctggc    480
tgctgctgcc tcgcgcgctg gggttccatg gaggaactgg gcctgccgcc ccggcctgca    540
cctgctgccc gcatgctggg gtcccatgga ggaaccaggc ctggcgcccc ggcctcgccc    600
agcggctggt gtgggcagct gttccctgcc tcgcagtgtc ctggaggcag ctgtctcgca    660
gactcagctt ggtctcccgc aggcttcaga aaaacccaat tgcacgtgtg ggattcttcc    720
ccagcccttg ggtgcggggt ctctgtgcac ttgagagctg ggggacccac ccaccgtctc    780
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195

```
ccactccaag ttcatcccag agcgtggggc ccgctgggca cctggcacct ggcctgcaga      840
tgctgctacg agtgaccagt gctgtgtgga ggaggccaag ggcggcccct gggaaaccgg      900
gcttcaacag tacaaggaaa agaaacttgc tctgttttgt aagagcgtgt tcctttttcct    960
ctttttttgtc actttaaaga ccaaaaagaa taaagaaaga aagaaaaaa aaaaa          1015
```

<210> 324
<211> 803
<212> DNA
<213> Homo sapiens

<400> 324
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ggcaagggaa aatgttacgt gttttcttct ttagcttggt tgtgggcact tctacagcaa       60
ggaccatatc atattcatct ttgcatccct ggcacatgca tgagaacata agtacttaat      120
aaatgcagtt gaatggataa tgaattagtg ttatttatgg attagaaaaa gcatgtttct      180
atttaagtaa gctgtaaaaa gtattattga atatttactg taaatatatg ttcacataaa      240
aaaataactt ggagggtctt tgtgtccctg ggcatattat ccatcttcca tgggaaagaa      300
tccactgtgg tttctgaaga gtgattggaa aatggattat tttgaggatt gaagaagtgt      360
tctttctgcg ttgtcacttt gttcaacagt aaaactttat tctcaggttc aactcgcatt      420
gtaacatttt gacagttttt tttaatcacc tacaatctgt aaagaatgta tatattcttt      480
tcagcatctc agtttgaaaa gacatgcagt taaacttgac cttttgataa tcgctcttac      540
aggtcattgt ctgttctaac agcaaattgt aaacatgtgc ttcatagata ttgtggctct      600
cagtcatcac tttgtcctat ggtatttatt gaatgttcac atactaatgg tgcacaggtg      660
ttttttttcta taaatcttct gactgtcctg taattcattc ttaagcttta acttgaaggt      720
atcgtaattg ccggcatttg atgtttagca ataaagaat aaatgtgtac cagcatttta       780
tgtttaaaaa aaaaaaaaaa aaa                                              803
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<210> 325
<211> 665
<212> DNA
<213> Homo sapiens

<400> 325
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atataagctc taaaactctc ctgtaatatc tctgacccaa tttagcacca ctttttttcca      60
tttcatttt taggactgaa acataaaaga accagtgtcc agaggcaagt gacatatgtc      120
ttacacttgt ggccatcctt catttcttca taaactttgc ttaaaagact aaaattccca      180
attccttata aaaaatatac tcttgccctc agccccagtg gccactggca aagactgtta      240
tttcccaatg gataagagag cctccttcat cttcttggcc atagttggga tgaggtgcgt      300
gtggtcatcc acacacttgg tcacacaacc gtccagctgc tgcttcacct gaagctcctt      360
actcccagta tccattgaat ctttggcttt gttgttgcaa tgcatggcgc accgggccag      420
gtggtgccgg aacttctcca actcactggt gagcaaagcc cgggcttgag ccagaggcac      480
atggcagtgc tttgatgtac tggtgcacct actgcatgga ggcctggctg tcctcacaac      540
agctggtgct gcaccggaac atgagaccct gcatcttcca gatgttctct ctytccagac      600
tyttcaccat ggagtccacc acctcctgca cccacagctg ctgcagctct gccatggcgt      660
cccca                                                                 665
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<210> 326
<211> 1454
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (668)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (676)
<223> n equals a,t,g, or c

<220>

196

<221> SITE
<222> (695)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (705)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (720)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (814)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (821)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (828)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (881)
<223> n equals a,t,g, or c

<400> 326

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ggcacgaggc accctacgca aaatagcgga ggtcggcgcc aagaaaagca ctgcaggttc    60
agggcgcatg cgcatttccg ctccttgccg gttttccgga cctctacgag tggctgcccc   120
acaaaatgcc tgcttctctg cggaatccta ctgttcttca catgctctct aataccatct   180
tttcatatcc actttctctt ccatgttgaa aaattaaatt gacaggctgg attctgcaaa   240
gatctttgga catttaagta tcttcgaccg gcgcgaaaag aggcggcctg accttggaag   300
tgggacgggg tcctgcagcg ggtccttccg gcgggtgaca ttcagccggc ggttcggggc   360
gacggactct ccattccaga accatggccc aatttgtccg taacccttgt ggagaagaac   420
cccggcgctg gtgaacgctg ctgtgactta ctcgaaagcc tcggattggc cacattttgg   480
taactaacgc caaggttgag ctggttcctt cccaacccct gctgaaatcc ctaaagctat   540
tcaaagcctg aaaaaaatag tcaatattgc tcagactggt agcttcaaac agctcacagt   600
taaggaagct gtgctgaatg gtttggtggc cactgaggtg ttgatgtggt tttatgtcgg   660
aaaaattnta ggcaancggg gcatcattgg ctatnatttt tgaanaccat gtgtgatcan   720
actgctatct gaataaaata aaaatttgtc aaaactcagt gtttttctcc cctcaaaata   780
ccccatgaaa aaggtcccca attttcctct ttgnaaaatt naaacccngg ggtttgtctt   840
ttaaaaacac ccctaaaatt accccgtctg gttttggccc ngccaattgg gaagggttat   900
atggtggcca atattaaccc gggtacctgg aattattatg ggggataacc ttttaatt   960
gaaggtttgg atatatatat ttaagcttta tttccagaac agtgagggtt aggtcttggg  1020
aaaactataa ctgccaaagt agaagaaata gtagtaccat atgccaagtg atagagatga  1080
atcatgtcag tagttagaat aacatttcaa ctgtttctt tgctaaaatc acagaaagac  1140
cctattgaca acatctatgt ctgtaaaaat gttagagtac ttgtcatctt gaatatagcc  1200
tccccaagag agaacagggt ggtattctaa gtatgtttct ttgtaacatc tttagcagta  1260
ggacagagcc atacatgtga aatctgattt ttatgtgtgt tattcgtttg tctggtttta  1320
ctacctttgc aaaaacaaaa taccccaaag atatttaaac aaggttataa tttagcatct  1380
tccctggatc taaatagtat attatatcct gaaataaatg aaatgattgc tataaaaaaa  1440
aaaaaaaaaa aaaa                                                     1454
```

197

<210> 327
<211> 853
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (225)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (851)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (852)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (853)
<223> n equals a,t,g, or c

<400> 327

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gagtggtgtg aggatagctc actgctgcct ttaactcctg ggttcaaatg atcttcttgc      60
ctcagtctct tgaataacta gaacatagta gctgaagaca tggatgtcat catctatttc     120
tttatatttt ttgtaacatt ttaaagctat tgcctagttt aataattatt tcagtttgtg     180
tatgtaagga caatcaggca tttaaattta taaaacatgt ttganaatct ttaaaagtta     240
cacttactga ctagttgctt gtctgttgca ctaacaaaat ttattattca tgtttcggga     300
atwycctctt taggtttygt ttgttttttt tttcatagta aattatccca gtacaagtgt     360
ctttgtacaa aattttgatt tctaagtttc tttaaaaata tcaatgccag ctgggcccag     420
tggctcacac ctataatccc agcactttgg gaggtcgaag aggatggctg aggaggttgg     480
atcgtttgaa ctcaggagtt tgggatcagc ctgagtgaca tggtgaaacc ccatctctgc     540
taaaaaatat gaaaattagg gctgggtgca gtggctcatg cctgtaatcc cagcagtttg     600
ggaggccgag gtagacggat cacttgaggc caggagtttg agaccagcct gggcaacatg     660
gtgaaactcc gcctctacta aataaaaaaa aaaattagcc tggcatgggg gcaagtacct     720
ataatcccag ctactcggga gactgaggca ggagaatctc ttgaacccag gatccggagg     780
ctgcagtgag ctgagattgt gccactgcac tccagcctgg gtgacagtga gactgtctca     840
aaaaaaaaaa nnn                                                        853
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<210> 328
<211> 1117
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (800)
<223> n equals a,t,g, or c

<400> 328

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caaaattccg gagctccacc gcggtggcsg ccgctctaga actagtggat ccccccgggct     60
gcaggaattc ggcacgaggt gctgatgagc gagcgggtra tgggcaccga gcaccccaac     120
accatccagg aatacatgca cctggccctg tactgcttcg ctagcagcca gctgtccacc     180
gccctgagcc tgctgtaccg cgcccgctac ctcatgctgc tggtgttcgg ggaagaccac     240
cccgagatgg cgctgctgga caacaacatc gggctggtgc tgcacggggt gatggagtac     300
gacctgtcgc tgcgcttcct ggagaacgcg ctggccgtca gcaccaagta ccacgggccc     360
aaggccytca aggtggccct cagccaccac cttgtcgccc gagtctacga gagcaaagct     420
gagttccggt cggccctgca gcacgagaag gagggttaca ccatctacaa gacgcagctg     480
```

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ggcgaggacc atgagaagac caaggaaagc tccgagtacc tcaagtgcct gacccagcag    540
gccgtggccc tgcagcgcac catgaacgag atctaccgca acggctccag cgccaacatc    600
ccgcccctca agttcacggc ccccagcatg gccagcgtct tggagcagct gaacgtcatt    660
aacggcatcc tcttcattcc tctcagccaa aaagacctgg agaatctgaa agccgaggtg    720
gcgcggcggc accagctcca ggaggccagc agaaacaggg atagagccga ggagcccatg    780
gctaccgagc ccgcgccagn gggggcccca ggagacctgg gctcccagcc cccggctgcc    840
aaggaccctt ctccgagcgt gcagggatag agagggagcc agacggacag ccagccagcg    900
gccccgtcac cagggagccc gactgcggga gaaggggggcg agcctgcggg cggaagagga    960
agcaaggccc tcttcctcca cgtctcaccc caccccaccc ccgtgtcctc ctgggagcct   1020
ggcctgcctg ccccgcagaa ggtgttttttg cgctggttca atgaatagat gatgcagagg   1080
caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aactcga                            1117
```

<210> 329
<211> 685
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<400> 329
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gggccgctct agaaacnagg gaccccngg gctgcaggaa ttcggcacga gcttgtattt    60
gtgtgtttat gtgagttctg tctaagagat cagataagct ctggaagctt catcatctgt    120
acctacatgt aactgtatct gggttacatg ggcaggcggt accaagtcct gctcttcgat    180
ggggtggctg agagataaag gttcctgaac tctccttgct gtgtatgcac cacatctgta    240
cttcagagag gtggaaaatc atctacaaca ctgcgtttct tgtggttgtg ctgttactgg    300
tataaagtca agtgccttca atgctaaagg ctcagaaatt tttcttaaac tgatttcatg    360
tcctatgcaa gtgttttcta caacctgcat aaccagtact ttgtaaaact tgtttacgct    420
tcaattgtac atagtgattt ttaaagaaat atatagtatt tttatttagg tacctccaaa    480
cttgaattcg tctgtgtgaa gcattgtaaa acgatacatt tctcttttga gtaccattac    540
agttgtacag aggttttcac tgcttctatt tttctactgt tactgataag catgtaacac    600
tgactttatc ctacatatag ttggcatttc aaataaatgg cttgtataga aaaaaaaaaa    660
aaaaaaaaaa aaaaaaaaac tcgag                                         685
```

<210> 330
<211> 2630
<212> DNA
<213> Homo sapiens

<400> 330
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gctgcacttc ccaggcccca ccagccgcgg ctccggctcg tagcccacag cccactgccg    60
gcggctgggc gctgccgagg ctcggggcgc gcgcagttgg cgtctgccag tgccaagact    120
gtgccgcccc cacagccgag gcgcgaaagg gggacgcccg gcctctgggc cgctgccttc    180
gctttctctt cgttgttgcg aacgccgtcc gctcaggagg cgccccgcga ccggcgcgat    240
gagtgccaac gaggaccagg agatggaact agaagcatta cgctctattt atgaaggaga    300
tgaaagtttc cgggaattaa gtccagtttc ttttcaatat aggataggtg aaaatggtga    360
tcccaaagcc ttcttaatag agatttcctg gacagaaaca tatccccaaa cacctccaat    420
tctatctatg aacgcttttt ttaacaacac catatcatca gctgtaaagc agagtatatt    480
agccaagcta caggaagcag tagaagctaa tcttggaacc gctatgacct atacattgtt    540
tgaatatgcc aaagacaata aagagcagtt catggagaat cacaatccca tcaattccgc    600
aacatcgata agcaatatca tctcaattga aactcctaat acagccccat caagtaagaa    660
aaaagacaaa aaagaacaac tttcaaaagc ccagaagcgt aactggcaga caaaacagat    720
cacaaaggag aacttcctcg aggctggaac tgggttgatg ttgtgaagca tttaagcaaa    780
actggctcta aggatgatga gtagcacttg gaatttgaga caaggaaaga gcattcttta    840
```

```
aagagtaaaa ctgggttcaa aatctttcat tactattttc tggtattgag gcgacttttt    900
ataaaacaca atttttgta tgtttcttac attaaaaagg ttgtaagttg aaagttcatg    960
aagagatctt gttgtattaa attattttca caaacttgcc ttaataaaag gtgaaaatgt   1020
tactgtttag tatactttat gaagcccctt gagctttata aatggacagg catggggaat   1080
aagaatcagt gttaatttaa atgatcttat cctggtggat gtgctrtttt cttaaaggag   1140
tatgaagccc ttttcaaact atcatcccag tggagcggag tactcagtga acagttactc   1200
catagtgcaa tccatattaa taggcttctt ctcttaagtc ttcatctctt cttttgctta   1260
attactgaac cgtaaattac ttcagagaaa tttaaatgct ggtatttgaa ctttatacat   1320
gatacttttt gtagtttctt ttaatttttg aaagatgaac tgcttccttt taataaatta   1380
atatctattt atacttttct cttgatttgg gtcaagatgt ttgatcatga gtgctttgag   1440
tggtatgtgg aataggagaa tataaaaaca aatctgccaa atacactaga aagcatttta   1500
gtaagaaatg ctggcccttt cttaaaacat ttctcttgca tataccagga tgggagtaaa   1560
agatgcctta atatttagtt tttgtattgt tggagacatt gattttaata aaatcctatt   1620
tatctgctgt tgtgtgcttt tagttgttgg ataactgagg tctcctaaat ggttcaacat   1680
aaaaccacat ttcaagtctt gtttcttttt ggagtgtctt ttcaagtatt caaatgtatt   1740
tctcaacctg agcatctttt taatcatata catgggagtc ttttaaatgc tgaactgtta   1800
cacatgcttg atttaaaaat aataataata gaggaaacta ttggtctagt tgtgccaaga   1860
aaagtttctg atgtttatgt gtgatgtaca gtgattttgt atatgcgccc agctttaaga   1920
acacataaaa ctattacgtc tggtaggaag attgttagtg cctcaagtta cacctgtgca   1980
gcttgggtct gagtttgat agaacagtaa acatttaaag aagttaagag cagtttgagc    2040
tgtatccgcg gttttttactc gttaactgac ttcagctaaa tagtttgaat tatagagtaa  2100
gtataattac agcaaaggag ttaatctcat tttcaaagct gtttctcatt ttatttcttg   2160
aattaatgta gagcaaaaca tgttaaaatt caggacmact ggaatatggc aacttatgtt   2220
tcagggttgt gtgtgggtag tatttgtggt tgtattggtt tgtttttttgt ttttggagaa  2280
acatctgcta gtggaataaa atactttgtt ttgctctgaa gagactgaaa ttgttcaggc   2340
ttattatggc tcatagatta cagagaatga tgctagttac atgccaatga actattttta   2400
ctctttttat atgaaatgta aaaatttgta ggggttctgg tgatggtggt acctcttatt   2460
accttatgta aaacacttga acagcctcat caatattgcc gtcatctgtt taacactccc   2520
agtatatttt ctcaatgtct gtttacttaa aattttgtgg agtgacataa ttaataagca   2580
ataaagtctg aattatacac agaaaaaaaa aaaaaaaaa aaaactcgag                2630
```

<210> 331
<211> 677
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> n equals a,t,g, or c

<400> 331
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aactggtgga tcccccgggc ctggcaggaa ttcgggcacg agaactgtat ggngttggtg     60
atggatgaac tgcaaggatc agtgaaacag ctgcaggcct ttatggatga aagtacccag    120
tgcttccaga aggtgtcagt acagctcgga aagagaagca tgcaacaatt agatccctca    180
ccagctcgaa aactgttgaa gcttcagcta cagaacccac ctgccataca tggatctgga    240
tctggatctt gtcagtgact ttatgagagt ttctgccaca aggtgcccaa gaggagagga    300
atgggaagag tgccccagca cgtggtgact gcgtgatttc tgctcgttgc ctttaaagrt    360
aactggcagg actgactgta gaacactttg acttttttca aaaagtgatg gaatttgtac    420
atccaaatga atattgtata gacaattttc ccaggaatgt gcaaaatgct tgaaagttca    480
aacttctttt ttgaaatgat cttcagatcc agtggcccat tcttttatct ttatcctgtg    540
aaggtgtttt tcaggttttg aaacaatcca aaaatcattt aggaccaagt ctaaggaaac    600
attttagtgg ccaagttgga ttccgattgt aaaggaatga tactaatttt ctagcatggc    660
tctgaaggtg attttag                                                    677
```

<210> 332
<211> 858
<212> DNA
<213> Homo sapiens

<400> 332
```
200
```

```
tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt      60
gaaaagaaaa agagtttact tgaaaaggtt caagggagtc agacttcaga aaaactggat     120
aagcaagtga aaaatataac aggtatttaa agaaaaatat aaagaagatt accatgatta     180
ctaagtttgc attaatttgt tcatggagaa aaaacaaaat cttatcacat gatgatcata     240
ttcagaaaga tcttgcaaca tgagctaaat aaaagtcaag aataaaatgg tgtttgctgg     300
ggatctggga ttataagaaa tactcaatgt ttcattattt tgggaccaga aattgacagg     360
gtaacgctgt tattttttggt taatcttagg gtacaaggtg cttcatcatg atggaaacaa     420
acagggcatg atttctgctt tgcttccaga agcataaagc aaatgtcact actacaaaat     480
atagatagga tatttcttat aactctaatc actgttgtaa gtaaataaaa atccaaagtc     540
aaatcataga ctctcaatta ccatggtttt tacacatttc taccatccct tcctggtgca     600
ctgtattgag ccatactgag ctatattttt ctacttcaca actttcact tacgggaaga     660
cagctattgt cccccacacc accctaatgt gggcaagagg accacttgac cctcatatat     720
ttaacactct tgaccctcat atatttaaca ttcataatta tgtattgcct aaatactcac     780
tgttgtagtc actgaaatgc ctgtgaaata attttaaaa ctgtatttac aaaagaaagc     840
ctatttctag ctcgtgcc                                                    858
```

<210> 333
<211> 1538
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (724)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (889)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (975)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1008)
<223> n equals a,t,g, or c

<400> 333
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ggcacgagca aataatcatc tgttgaaaaa tatgaagaaa attgtggatc aaaacacaaa      60
gcttgctcct gagaccaagg ctgtcattca ttggattatg gatattcctt ttgtgctttc     120
tgccaatctc catggaggag accttgtggc caattatcca tatgatgaga cgcggagtgg     180
tagtgctcac gaatacagct cctccccaga tgacgccatt ttccaaagct tggcccgggc     240
atactcttct ttcaacccgg ccatgtctga ccccaatcgg ccaccatgtc gcaagaatga     300
tgatgacagc agctttgtag atggaaccac caacggtgtg cttggtacag cgtacctgga     360
gggatgcaag acttcaatta ccttagcagc aactgttttg agatcaccgt ggagcttagc     420
tgtgagaagt tcccacctga agagactctg aagacctact gggaggataa caaaaactcc     480
ctcattagct accttgagca gatacaccga ggagttaaag gatttgtccg agaccttcaa     540
ggtaacccaa ttgcgatggc caccaatctc cgtggaagga atagaccacg atgttacatc     600
cgcaaaggat ggcgattact ggagattgct tatacctgga aactataaac ttacactcag     660
ctccaggcta tctggcaata acaaagaaag tggcagttcc ttacagccct gctgctgggg     720
gttnatttg aactgggagt cattttctga aaggaaagaa gaggagaagg aagaattgat     780
ggaatggtgg aaaaatgatgt cagaaacttt aaattttaa aaaggcttct agttagctgc     840
tttaaatcta tctatataat gtagtatgat gtaatgtggt cttttttna gattttgtgc     900
agttaatact taacattgat ttatttttta atcatttaaa tattaatcaa ctttccttaa     960
aataaatagc ctctnaggta aaaatataag aacttgatat atttcatnct cttatatagt    1020
attcattttc ctacctatat ttccccaaaa agtttaggaa aggtttaaga attttttgcca    1080
tccctaggct taaatgcaat attcctggta ttatttacaa tgcagaattt tttgagtaat    1140
```

```
tctagctttc aaaaattagt gaagttcttt tactgtaatt ggtgacaatg tcacataatg      1200
aatgctattg aaaaggttaa cagatacagc tcggagttgt gagcactcta ctgcaagact      1260
taaatagttc agtataaatt gtcgtttttt tcttgtgctg actaactata agcatgatct      1320
tgttaatgca ttttttgatgg gaagaaaagg tacatgttta caaagaggtt ttatgaaaag      1380
aataaaaatt gacttcttgc ttgtacatat aggagcaata ctattatatt atgtagtccc      1440
gttaacacta cttaaaagtt tagggttttc tcttggttgt agagtggccc agaattgcat      1500
tctgaatgaa taaaggttaa aaaaaaaaaa aaaaaaaa                                1538
```

<210> 334
<211> 1085
<212> DNA
<213> Homo sapiens

<400> 334

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ctgcaggaat tcggcacgag gtgcatcttg cccattgatt tctaaatgta ttaactactt        60
aaattaatcc tgaatctttt cccaggctta agtgggataa tgttttattg tagatgcata       120
tttcctggct ctacccagtc tttctttgaa gactttatca tcctattttc tgaatccagt       180
ggctgacttt aatcttctct ggaggaacta gataatttct agactaatgc ttacactcat       240
gatccagatt gtaatttctg aactccttct tccaaataga atcaaaacaa gaaaggggaa       300
agcctctcaa agcaactgtg cgttaataat gaaacactct tttttctaa tccaaggagg        360
gtttcatact ttttcttagt ttcttgccct cttcccttct gatcaataat tgtaatagga       420
aatttgcaat tgtgccaata ctcagattca atactgaact actttcttgc attgtaattc       480
aaattccaag gttaacaact agctgtatgt ttccaaaaca atcttattgt atatgtattt       540
tcttaggtga agtttccaga aatgattttt tttttttgca gagccaaaca cacatggtaa       600
tttaaaaaaa taatgcacgt atgtggtaaa aacagtaaaa gcaaggtatc aagtaaaaag       660
tgaagagtcc tccctttctc attcccattc ctactctcta attttttata tatccatttt       720
gtaagctata atacagagat tccatatact cttcacatac tttccccagt ggtaacctct       780
tgcataacta taggacaata acacactata ggacaaaaat caagaaattg acattgatac       840
aatccatctc caaaaaaaga aaaaagaaaa agccagacat ggtgatgtgt gcctgcagtc       900
ccagctaatt gggaggctac agtgggagga tcccttgagc ctgtgaggcg gaggttgaag       960
tcagctatga tcacgccact gcactccagc ttgggcaaca gagccagacc ctgtctcaaa      1020
aaaacaaaaa caaacaaaaa aaagaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      1080
aaaaa                                                                   1085
```

<210> 335
<211> 1046
<212> DNA
<213> Homo sapiens

<400> 335

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ggcacgagct tatttgttgc tagtggcaat gtcagctact actgacaaca ttatttgaaa        60
ggcaatagtg tgtatcagga ccttttaaaat atatggacat atttatcctt taagtctaac       120
cttcatcctt tcttcataag ttttacaaat actgtatgca tttctgtggt aggtaagtga       180
taaacttact aagcttaaaa tgaacagaat cttagatgag gtttcttttc attttctgtt       240
tttaagagga gttgctttgg tttggcctct aaacaagaag agcacaaatc ttgctgccta       300
cacagttgat atttggaact attctagtgg ttctatttaa ttttcaaaac cgggttatga       360
aatggagaat taaccacttt ttacagataa ggaaacaaga ttagaagtat tttacatgtg       420
gttttagaag ggtgtttact gaatgaactg ttttataaga tgtattactg ctggtctcat       480
gttttattat catactgtac ccctggtgga aatcaaccta agaaactctt ttgtatttaa       540
aaatggaaat aattactgtg cctttgaatt gaagtaatct acaaaagaaa tgtggtccag       600
actttagact ttgttgggac tgtgatgatc atttctggct tttggcaatc tggatctgaa       660
cctttggttt tatttagctt tccagttctc agggaacaat agaaaccagt cttcaggata       720
tcgacagcag attatctcca ggtggatcac tggcagacgc atgggcacat caagaaggca       780
ctcatccgaa agacagaaat gtagaaaaac tacaagtcct gttaaattgc atgacagaga       840
tttactatca gttcaaaaaa gacaaagcag aacgtagtaa gtaaaatttg ctatttgtta       900
atttaataaa tccctcttag taattagtta taattcagtt aaattaattt ggtatatctg       960
taagggtagc ttcttaagct gttttttttca gagatgtgat tctgtcagga aaaaggttga      1020
ttgtgtttaa aaaaaaaaaa aaaaaa                                            1046
```

<210> 336
<211> 1422
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202

<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> n equals a,t,g, or c

<400> 336
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gttgtggatg cgcggagagg ccggcagcgg tggcagcggc acgnaggagg aagctgagca   60
gggcggcggc ggcggtggaa cctgcggggc tggggcgcgc gccatgggcc gcctgcactg   120
cactgaggac ccggtgccgg aggccgtggg cggcgacatg cagcagctga accagctggg   180
cgcgcagcag ttctcagccc tgacagaggt gcttttccac ttcctaactg agccaaaaga   240
ggtggaaaga tttctggctc agctctctga atttgccacc accaatcaga tcagtcttgg   300
ctccctcaga agcatcgtga aaagcctcct tctggttcca aatggtgctt tgaagaagag   360
tctcacagcc aagcaggtcc aggcggattt cataactctg ggtcttagtg aggagaaagc   420
cacttacttt tctgaaaagt ggaagcagaa tgctcccacc cttgctcgat gggccatagg   480
tcagactctg atgattaacc agctcataga tatggagtgg aaatttggag tgacatctgg   540
gagcagcgaa ttggagaaag tgggaagtat atttttacaa ctaaagttgg tggttaagaa   600
aggaaatcaa accgaaaatg tgtatataga attaaccttg cctcagttct acagcttcct   660
gcacgagatg gagcgagtca gaaccagcat ggagtgtttc tgctgatttc tgtccctgca   720
tctcccctrg ccccgttccc tgccctcctc ccttccctgg gtgactgctc tgagaggcac   780
ttcactcaca ggcctgtggg atgctccatg gggccctgct ggctccatgg ggcccaggtg   840
caaagggttt ctgaaaaaca gcaggattaa gtactgaaag agcccaacac aattaccctg   900
taaactctct gttagggcaa ccaccaccac ctgtcttcca ggacacattt ttagatactc   960
tgacaggcca ctgcatctca gattcagggg agaaaataag ttgtcacctc cccttcaaag 1020
ttccagagta aacaaatggt gccatcattc aagataacat gctgatcacc ctcctcccaa 1080
aaagcaagag cttgtttatg gctgaggaat cggcggattg tctgaatgac acatatacag 1140
agcccccacg gatttctgca cactctgggt ctgtgctggt ggaacattgc caatcagttc 1200
ttaatgaggc acctgtgtgt aaatacatgc ttggtcttct ctgcagagaa ctgaggctaa 1260
actctgtccc tacttctggt tttgccctgt catgtcgtaa cgaggtgggc cttttgaggc 1320
cattttagtt tgagttcgag ccaaccacct ctgttggtta gatgatgaat aaaaaggttc 1380
tgaagaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ag   1422
```

<210> 337
<211> 419
<212> DNA
<213> Homo sapiens

<400> 337
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ggcagagcat gaacttgcgt ctagtttctg ttccctctca aattgcccag gctgtcctgt   60
gagtgacagc agctatttcg tgggcctcct ctggaatcat gagaagtcac ccaaacaatc   120
tcagtttttct agctcactcc gtcttgacat ttctacactg tcatccttgg ttttcttgga   180
aattaatttg cttttcttca ttgtctttct ttggagctgc tttccttttg ttggttacta   240
ttttattttt agcttctcac accataccga catatgttgg ttattctttt agacatgttt   300
tttgttgttg ttgtcacctg gaacttttgt atcttgaata aatttgggga tcaaatacaa   360
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa   419
```

<210> 338
<211> 1691
<212> DNA
<213> Homo sapiens

<400> 338
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ggcacgagcc taaattctat ttctgtcatt tcagccagct cagcctggat aaacactctt   60
gttagagaat ttgtatggtc atttggagca catatgacac tctggccgtt ttaatttttg   120
gagttcttgc gttagttctt tctcatctcc atgtgtgggt gttcctttaa ctgccatata   180
gattgagtac agtcaataga tttctggctg ttttcactag gctgaggcct tgtgcagggt   240
ctttttttga agctgacttc ttgtctctag tttcagaggt gagtatgtta gtgaggtatt   300
cttggtgttg aagctttggg gtgtgatcca gtaggtggca cttaggctta ttggtcaact   360
ggtagactct tgctcagttg tgtggctcct ctgtgttttc tcatagttac agctgtgttc   420
```

203

```
actctcaatg ctctgaaagt gtgggttcct ctcccccttc agtgccagct gtatggctac    480
agattgtggt ttgacactcc tggctgccca ctgcagctct ggggcaatgt cagtgtttac    540
gttccttcct caacttggcg gcaacagagg aaaggacctt agtagtggtt gtggtcaagg    600
gtcttttgct tgtatcctgg gagctccaca ccagagagat gtaggtcagc aattcctcag    660
tgcaatcacc ccaggatgaa gggtctgtgc tgtgggctca agccaggggt tctctctggt    720
gatgagtggg ggttgggggt gtgggaacca tgggagacag actggcctcc tcttcttggg    780
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ctgagggtag caagggcagt tctactgcag agacagtggc agagaggctt tcaggaacag    900
tatttattaa ccatcctcac ctccctaccc gccccacccc tattacacta cccagcctct    960
ggtagccatc cttctactct ctattttcat gttttcaatt gttttgattt ctagatccaa   1020
aaataagtga gaacatgtga tgtttgtctt tctgtgcctg gcttatttca tttaacataa   1080
tgacctccag ttccatccat gttattgcaa atgacaagat ctcattcttt tttatggctg   1140
aatagtaatc cattgcagat aagtgccaca tttcttat ccattcatct gtgaatggac   1200
acttaggttg cttccaaatt ttggctgttg tgaatagtgc tgcaacaaac atgggagtgc   1260
aaatatattt tctatatact gatttccttt cttttgagta tatacccagt agattgttgg   1320
gtcatatggt aactctattt ttacttttat gagaaacctc caaactcttc tccatagtgg   1380
ttgtactaat ttacattctc atcaacaaca tatgaggggtt tccttttctc tacctcctct   1440
ccagcatttg ttactgccct ggtgttattt tgcttcttaa gtattagaac tatacttagt   1500
gttatatgtt ctgtgattat aagtaaaact gcctttgcta tatagtatgc atagaatatt   1560
ttaaagttat tactagaagc tgacacattg ttgtttttcta ttacaaacaa taaaattagt   1620
ttccatttaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa   1680
aaaaaaaaaa a                                                          1691

<210> 339
<211> 1744
<212> DNA
<213> Homo sapiens

<400> 339
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<210> 340
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204

<211> 957
<212> DNA
<213> Homo sapiens

<400> 340
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<210> 341
<211> 1032
<212> DNA
<213> Homo sapiens

<400> 341
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gatcaagaag gtaagagtag taatgattgg ttttgagaat ttaattttct gtgcttatca   300
tggaataaat ttagctgaat taaaatgcat tataattaca agagttagga tatcttaaaa   360
tatctagtga ggctgtataa cctagcaaga tcaaacaaac tcattgctat tggattttaa   420
gaaattggat tgtcaagaag ataagtaatc aatatggctt ggctgtgtcc ccacccaaat   480
ctcatcttga attatagctc tcattattcc cacatattgt gggagtgacc tggtgggaga   540
caactgaatc atggggcag ttttccccat actgttctcg tggtagtgag taactctcac   600
gaaatctgat ggttttataa ggggaactcc cttttgcttg gctttcattc tgtcttgcct   660
gctgccatgt aagatgtgcc tttcgcctta tgccattatt ctgaggcctc cccagccacg   720
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<210> 342
<211> 1390
<212> DNA
<213> Homo sapiens

<400> 342
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cccctggggg acctgggccc tgcccttggc tcacctttct ctcctcagca gaacatgtct   180
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tgggttctgt agctgagaga tttttattca tttttaactg cccccaacc ccactccaac   420
tccttctcca ccacccattc tcccaatggt ctttagaaat agattttcat ctgatattct   480
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aaaaaaaaaa                                                          1390


<210> 343
<211> 1590
<212> DNA
<213> Homo sapiens

<400> 343
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<210> 344
<211> 1461
<212> DNA
<213> Homo sapiens

<400> 344
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cctccttgag gtagccccag cctgagatca ggcacttctt gctgggtggg aagatgtgtg    180
tggcagccgg gaggcacacg ggctggatgt gccggccgaa aggcagaggg ctggtcagct    240
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206

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aggccaccca cttcgtcggg tcttggaacc tgcaggagca gaccccagct cagaagccac    420
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<211> 1651
<212> DNA
<213> Homo sapiens

<400> 345
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<210> 346
<211> 1720
<212> DNA
<213> Homo sapiens
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207

<400> 346

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<210> 347
<211> 1247
<212> DNA
<213> Homo sapiens

<400> 347

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aattgctcat agaagtcaaa tagaggttac cctgtaagaa tgggttggtg actagagtga     180
gcacacccag attctggggt cctagtcatg ctctgtgtct tgacctaagt atacaggtac     240
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acaaattaaa tactaagcca agcagactta ctaaattcta ccaaaagcta agaagctatg     480
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<210> 348
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208

<211> 1830
<212> DNA
<213> Homo sapiens

<400> 348

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gacatcagta agctctactt tttttttttt ttttcttttg agattaagtc tcactctgtc     660
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<210> 349
<211> 977
<212> DNA
<213> Homo sapiens

<400> 349

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tccctctgct cctcctcctc cgccggatcg cggcgagcgg atcgaggact gcctagcgcc     180
cctctgccca ccggtggttg gaggccgcgg cggctgcgcg ttgagtcgtt tcctgccggt     240
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gtgccggtcg cctagtcagg agaactagtc ctcgactcac ggtgagggaa tggacgacac     360
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cttactcatg gatggtactt cttcagcctc gttagacagc ctggtgatgg aggatgaaga     660
aaccatgtgc ttttcattca gttctggact tagtctccct tttcttcctt cagcaagtta     720
tttttgttag ttccttatca aaaagtgtac ataaaaatta ggcaactcca aacatgcctc     780
cagggttaat gtgtgaaata ataagataat atatgtaaag tggaattagc tcctaggcat     840
agggaaagtg cagaatattg ccgtgttgtc atttacagtt ctgttgatgt cgataacgtt     900
tgtgggtgta attggtagtg ttctgtccct ccaaggagtt aataaaacaa agcaaacata     960
aaaaaaaaaa aaaaaaa                                                    977
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<210> 350
<211> 1893
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1842)
<223> n equals a,t,g, or c

<400> 350
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cttcatgtac ggaccaatgc cattattgtg agagtgggtt ttgccctgtc ttgctctgtt     180
tcatgccctt tctttgcact tctgtcatgc gatgccttcc accacattat gacacagcaa     240
gaaggccctc acaaggtgcc agcaccttga tatttgactt ccagcctaca gaactgtgag     300
tcaataaatt tctgttcatt ataaagtagt caatctcagg tattctgtta cagcagtacg     360
aaattgatta agacagctaa tttattcaat taggcagaat tcatctgctt atatgcaaga     420
gtagccaggg gttcyctctt tatacacata ccttaaagga tgggttatcc tgaaaagcag     480
atatgaagaa ttgtgaaaaa gagctatctc aacagttagc tgtggagtgt ataatttaat     540
acaaataaat acaattgtaa acgttcatgt atakttcagt taggkttttg ttttgttttg     600
ttttgttttg tttttttgag atggagtcta gctctgtcac ccaggctgta gtgcagtgac     660
cgcgatcttg gctcactgca gcctstgcct cctaggttcg ggcgattctc tgcctcagcc     720
tcccgagtgg ctggtattgc gggtgcccac caccacgcct ggctcatttt tgtatttttg     780
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aattggcaac atactgaagt cactcactct caactaaaag atatgatcat ttctagtata    1140
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ttattatttt attatataac tcctagaaaa ggggaatcat gattataaaa caaaacgaaa    1620
aacaatctgc ctttatggaa taaaatgatt attctgaaaa tattctataa aaacataata    1680
tatatttagt tatttttcaa ataaatgatg tagagcaggg ttttcagcac tctctactaa    1740
tcacatctac tgtggaggct gaggcaggag aattgcttga acccgggtgg cagaggttgc    1800
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aaaaaaaaaa aaaaaaaaa aaaaaaaact cga                                  1893
```

<210> 351
<211> 847
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (765)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (812)
<223> n equals a,t,g, or c

<400> 351
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```

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taatagaact  gctgtcttct  tccaagttaa  acaaaacttt  ggagctaaaa  gctagctagg   180
tcaagagaaa  caaaatctaa  tcctcaccca  attgagagac  tgaatataca  aagaatggcc   240
aaacctaacc  atgacctcct  acccataacc  tcttcagtaa  tcggccagaa  gggtcaggac   300
ttaatcttta  accggcagct  tccctatttc  ttgcccctgc  ttccagctct  gggccaatca   360
gagaaagcca  aatgtgctcc  tcacaccaat  cgcgtaagaa  gccctgcttc  tagtatagcc   420
ctcctccaac  ttcccgatgc  caacatcctc  caatcagagc  caacctgaag  tttctccctt   480
ttttcagtat  atgtaaagct  tttccactcc  cctgcctgcc  tatgagtctg  ttaaatcaag   540
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taaaaagaag  gttcggctta  catttttttt  ttattttaaa  tttacagcat  ggcgtctcca   720
gcccaggttt  taaaatacct  tctaatgtaa  ggaaatagcc  ctgcnccttg  tgcccatcct   780
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actcgag                                                                  847


<210> 352
<211> 1230
<212> DNA
<213> Homo sapiens

<400> 352
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taagcaatta  gacgtctaga  gtttcttttc  ctctatccct  ttgggtaaat  agcaaccagt   120
ggtgcccgcc  accacgcctg  gctgattttt  tgtatttttg  gtagagatgg  ggtttcacca   180
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tggaggttct  tccctatctt  acctactccc  aagtatgcat  gtttttgaaa  aaaatattta   420
agatttctag  agaagatcac  aatcttctcc  agtgtctgtg  taatccattg  tggagcagtt   480
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tgacagtcgg  aaaagtgatg  ccctattttt  ttttttttt   ttttgagatg  gaatcttgct   780
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catgcccagc  taatttttgt  atttttatta  gagaccatgt  tggctagact  ggtcttgaac   960
tcctgacctc  atgatccgcc  caccttggcc  tcacaaagtg  ctgggattac  aggtgtgagc  1020
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ggtgaattaa  ccttagcata  tgatagttct  cttaatgttt  cccaccaccc  ttttcagagt  1140
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<210> 353
<211> 2575
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2555)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2557)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2569)
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<400> 353

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gggtaagatg tcccttccca gccctgagac cactggtcac agttggccac ctccaacggg     180
agaccttgtc cttggcctag agtcctccca cccttggggg gctcctgcct gaggtcctca     240
gaatcccact gcaatggacc caggcagcgc ccaggaagcc atgctgggcc cccgccagsc     300
ttatcccaaa agcaggggcc agggaggggg cgacttgcct gccctgaag cccttgttcc      360
cattggcccc agtttgcatt ctgcaggttt tccattttag tgggttctgc ttttatttca     420
gagacagaca tgtgtcttct ctgtccgttt ccaataggta aagccatatc agttagactg     480
caatacttta aacacgagac aaaacaatcc atatgtttag ggaaccagaa aagtcccctg     540
gtctgtccct tctttgggga gcagggcctc gacagctcca gctcccttga cctaccttcc     600
tccccgcacc ccgcccccac cttgtgcccc tgtgtccagc cccccagggg gcctgtgtct     660
gtgtctgtgc ctgtgtctgt gatggggagc cgcctcgcac ccctgttgtc tgcttgtctc     720
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agacaggcag ggcccagtcc aggggcccca ggcctcccca gtcccagtgt gcgagcccca     840
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gacagtgatg caaggacaca gagagtacca gataggtagc agagaccaag cgcagggtg      960
cttcagatga gcaagagaac ccagtcgaac cagataccc aggtgggccg gagggacccc     1020
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gggatcgggg ctttcagccc accctgatgc ctgccctcca ggatggctgg tttagtctgg     1140
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cccctgaacc tgaccaaaag ccatggctgt tgctcccccc tttgtatgat gcaaatgctg     2460
aaatgtacaa aatcaaccat gacaacaaag aaaaagacct tgtacagcaa aaaaaaaaa      2520
aaaaaaactc gaggggggc ccgaacccaa atcgncnaat agtgagtcna anaca          2575
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<210> 354
<211> 1100
<212> DNA
<213> Homo sapiens

<400> 354

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gagtgtgctc tgggcttgga cacttgccgt ggtgcccctg gctggccgag gagactggct     180
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aggttgatgc cagagccgta agaatgcgcc agtgcgggtt tgcgggggac ttcgggtgtg     960
gggtcctgcg gccgcgatgg ccgtggaagg ttctggggat ccctgctgcc acggggacga    1020
gttcggacgc caggtggacc tgtgcactca gtaaaacgca gtgattcaac ctggaaaaaa    1080
aaaaaaanaa aaaactcgag                                               1100
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<210> 355
<211> 2129
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2097)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2120)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2125)
<223> n equals a,t,g, or c

<400> 355

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ccggtgagag gacacgatct ttacctgcac aatcagactg taagcccagc agagaacccc     180
aggggcgcct gggtacttct cggaggtcat cttagttgtg gtggggaaga caaagaaata     240
agcaaacaag aaactagagt tactatacaa gaaactctcc tgagtttgta aaccttaagc     300
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ccattgacac tgtcacctgg gagctccatg ggccgtaagt ctttgacagc caatttaatt     420
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taaaattccc atcccagttc cactcccctg aagtgaaacc cttttttttt tgtgacagta     960
aatcttaaaa atcattgtct ctttatgaac atttcctcag tttcttctct gctgaaaatg    1020
taagccatgc tacttttaa tgtattttga attttgtgct cattggaaat tgatatgcta    1080
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213

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atgcctcccc caccccccgc cagacttttc tttttatact ttgtcttgtt tttactgggg   1140
taggctgggc atgcgtgcgt gcctttaggg cagcatttta aacctttgcc aaaattgcaa   1200
atgggacatg tacattcttc tgctccatcc tacttaaaca cctatcagct atttttatct   1260
ttaacctttt ctgtatgttt gaagtgtgtg gggggtgtgt gtgtgtgtga aagagcgaga   1320
gaatgatgtc atctaaagtt ttttgaagaa ttatttggtt ttcattgcat taaaattcta   1380
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attcccatga attatgtcca gttcttcttg gaaaaaaatt tggttttgaa tgaacctgca   1560
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<212> DNA
<213> Homo sapiens


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<211> 2746
<212> DNA
<213> Homo sapiens


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215

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216

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217

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<212> DNA
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tctttccaat atagatgtgg tcatgtttga cttgtacaga atgttaatca tacagagaat    1860
ccttgatgga attatatatg tgtgttttac ttttgaatgt tacaaaagga aataacttta    1920
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218

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aaactattct caagagaaaa tattcaaagc atgaaatatg ttgctttttc cagaatacaa    1980
acagtatact catgagcaaa aaaaaaaaaa gggcggccgc tctagaggat ccctcgaggg    2040
gcccaa                                                                2046


<210> 362
<211> 2636
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (887)
<223> n equals a,t,g, or c

<400> 362
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gtcgcattgc tctcggccgc actcgcgctg tacgggccgc cactggacgc agttttagaa     180
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<210> 363
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219

<211> 2047
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<400> 363

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aacggccagc aggtgcttgt gtgcagccag gaaggcagca gccgcaggtg tggagggcaa     300
ggggacctcc tgtcgggctc cctgggcgtc ctggtacact gggcgctcct tgctggacca     360
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atcgccgagg tgggggccgc cttcagcaag ctctttgaaa cctgagcccr cgcagaccag     540
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gatgttatgg cgacactaaa caaagtattc ctgaactttc cttagctcct tggtagtaac     780
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aattctt                                                            2047
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<210> 364
<211> 840
<212> DNA
<213> Homo sapiens

<400> 364

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cccaacttgg ggacagcctt attcccaaat gtctctatcc ttttgactgg agcatcttct       180
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<210> 365
<211> 4151
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4115)
<223> n equals a,t,g, or c

<400> 365

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gcacgtagca aaaggccatt gaggaacaga gcctgatgaa acgaacaatt tttcaaagtc       180
tggttacaga gaaggaaagt gaagcatctc aaggctggga tgctgctgcc cacccccacc       240
ccacccgcc rccaagtgac attgaggctg ggcaggccac atggctgggc cctggcgctg       300
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221

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<210> 366
<211> 1714
<212> DNA
<213> Homo sapiens

<400> 366
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<210> 367
<211> 2329
<212> DNA
<213> Homo sapiens

<400> 367
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<210> 368
<211> 2207
<212> DNA
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223

<213> Homo sapiens

<400> 368
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<211> 1069
<212> DNA
<213> Homo sapiens

<400> 369
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<211> 1436
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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225

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<211> 2396
<212> DNA
<213> Homo sapiens

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<211> 1984
<212> DNA
<213> Homo sapiens

<400> 373
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226

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<211> 1425
<212> DNA
<213> Homo sapiens

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<210> 375
<211> 1953
<212> DNA
<213> Homo sapiens

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<210> 376
<211> 996
<212> DNA
<213> Homo sapiens

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228

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<210> 377
<211> 1165
<212> DNA
<213> Homo sapiens

<400> 377
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<210> 378
<211> 1381
<212> DNA
<213> Homo sapiens

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caggaattga acctccactt tgcatctata gtgcttcaga ccagccttga ggagaatgtc    180
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229

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<210> 379
<211> 775
<212> DNA
<213> Homo sapiens

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<210> 380
<211> 1474
<212> DNA
<213> Homo sapiens

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<210> 381
<211> 2100
<212> DNA
<213> Homo sapiens

<400> 381
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230

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<210> 382
<211> 1607
<212> DNA
<213> Homo sapiens

<400> 382

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<210> 383
<211> 1432
<212> DNA
<213> Homo sapiens

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<210> 384
<211> 2280
<212> DNA
<213> Homo sapiens

<400> 384
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<210> 385
<211> 2261
<212> DNA
<213> Homo sapiens

<400> 385
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<210> 386
<211> 2455
<212> DNA
<213> Homo sapiens

<400> 386

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<210> 387
<211> 639
<212> DNA
<213> Homo sapiens
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<400> 387

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caaaactttg ctattcatag ttaatcaaat agaactgggt tttttttttc agagtgtggt     540
gtaaataaag aaatataaga agttctgttc tataactgct ctgttaacat agtttttaaa     600
cattaaaaaa tgtgaactaa aagtaaaaaa aaaaaaaaa                             639
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<210> 388
<211> 2534
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (174)
<223> n equals a,t,g, or c

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<221> SITE
<222> (1350)
<223> n equals a,t,g, or c

<400> 388

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caattcgccc tatagtgagt cgtattacaa ttcactggcc gtcgttttac aacgtcgtga   2100
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<211> 1124
<212> DNA
<213> Homo sapiens

<400> 389
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<210> 390
<211> 1786
<212> DNA
<213> Homo sapiens

<400> 390
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236

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tcaggcttcc tcacattttc cctatctcag cccwrgcatc agtcattctc yaagaagctc   1200
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<211> 1688
<212> DNA
<213> Homo sapiens

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<210> 392
<211> 1487
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (840)
<223> n equals a,t,g, or c

<220>
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237

<221> SITE
<222> (892)
<223> n equals a,t,g, or c

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aagcagagac ctctacagac ccaagtcacc aagtggagcc ttttttttttc ttattttaat     180
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ataaaaccgt aaactctgga aaaaaaaaa aaaaaaaaa aaaaaaa                      1487
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<210> 393
<211> 2834
<212> DNA
<213> Homo sapiens

<400> 393
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gcctcctgag tggctgggac tacaggcaca tgccaacaag cccaggtcct gggatgaccc     180
gagcaatcct gtgcctgcta ctctgctgcc caggacactg agagaaccag tgttctctgg     240
gaggaaacca ctggtcatgg tcttactgct atgccctctc tgatccaggg atacagcagt     300
gaaaggtcac cccacctgca ggaaggggtc gctgactcca gatatgctgt gttctgtgga     360
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238

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tagacactca catccctgtt ccatcttcct ctttaaaacc agattaacct gtggggcatc    1500
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aaaaaaaaaa aaaa                                                      2834

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<211> 1380
<212> DNA
<213> Homo sapiens

<400> 394
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gatctcaaca tgggagtggc ccagcctgag ggggagacac agaggctcaa gcaactccag     180
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<210> 395
<211> 1140
<212> DNA
<213> Homo sapiens

<400> 395
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239

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<210> 396
<211> 1305
<212> DNA
<213> Homo sapiens

<400> 396
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<210> 397
<211> 1962
<212> DNA
<213> Homo sapiens

<400> 397
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ccgtgtcgcc accagtaccg accctcgtg cagcggcttc gccccgccgg acttcaacca   360
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240

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cgccctcctc tgcattctca gcattatgct gctgccggag accaagcgca agctcctgcc    1500
cgaggtgctc cgggacgggg agctgtgtcg ccggccttcc ctgctgcggc agccacccccc    1560
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tgagtaccct ggcgggaggc tggcccacac agaaaggtgg caagaagatc gggaagactg    1680
agtagggaag gcagggctgc ccagaagtct cagaggcacc tcacgccagc catcgcggag    1740
agctcagagg gccgtcccca ccctgcctcc tccctgctgc tttgcattca cttccttggc    1800
cagagtcagg ggacagggag agagctccac actgtaacca ctgggtctgg gctccatcct    1860
gcgcccaaag acatccaccc agacctcatt atttcttgct ctatcattct gtttcaataa    1920
agacatttgg aataaacgag cataaaaaaa aaaaaaaaa aa                         1962
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<210> 398
<211> 1880
<212> DNA
<213> Homo sapiens

<400> 398
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ggcacgagag acgccagagg tgcagctcca gcagcaatgg cagtgacggc gttggcggcg      60
cggacgtggc ttggcgtgtg gggcgtgagg accatgcaag cccgaggctt cggctcggat     120
cagtccgaga atgtcgaccg gggcgcgggc tccatccggg aagccggtgg ggccttcgga     180
aagagagagc aggctgaaga ggaacgatat ttccggtgag gctcaccggg tcccaagtcc     240
agccctggat ctcccaatgg ccttccaatc cttaaactgc caatcgcccc acccgttcct     300
acctggtgcc ttgggcgccc catcccccaa cagaactccc gggccccaat ccagtatacc     360
ctaacccttg atgtcccgac cgttgccacg tatagggcac tcccagttac ctgcacaaca     420
gtttcaggcc cccaaaccgt ttccaccggc gggtctccaa aacaacccac ggctcaactc     480
ctcctttatc attaccatct cccgcgtgga gttctcctca ggtcgtgcga aacacccccct     540
agattcttcg cacagtgtct agatccgacc gcccaacgtt tgcctcccag cctgactccc     600
tcggccctta cccacctgtc accccctcta cgctctcctt cctcgccagc acgccttagc     660
tttgcaagcc tgcatgcatt caggcttctc aggtgtttct agaccccga ctccgcaaga     720
gtgaggatga tgggagctgg tcatgggagc tacttatggt tggacaccat cttctaaagg     780
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tggagagcag tgaggaatta atcttgcttt tgcttgtcct ttggcctttc acttctgcct     960
tctgttgaga attatcacca tgacacctgc cataccgtat agagagccaa ggtacagccg    1020
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tgaccaaacc aacattgtaa tccagtccct tcttggaacc taaattgaac tgccaagtac    1140
tgcgcatgca agagacctt tattggcctt acagtgggcc attcatttct ataggcaaag    1200
aaagctctag acagattgga ataggaaatg gatatttgcc ttttagctac acccctttgt    1260
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tggggtattc tttcactagt tgaggagtag aagaggatga ccagctagac tcccatggaa    1500
ttggaactcc tattccttgc ttagacatta caggttatgc tttgagatct ctttggggtg    1560
aaggattgaa attaaacccct gagccaccgt gtccttgtag agcacagagt agagaacaac    1620
```

241

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tggcagcttt gaaaaaacac catgaagaag aaatcgttca tcataagaag gagattgagc   1680
gtctgcagaa agaaattgag cgccataagc agaagatcaa aatgctaaaa catgatgatt   1740
aagtgcacac cgtgtgccat agaatggcac atgtcattgc ccacttctgt gtagacatgg   1800
ttctggttta actaatattt gtctgtgtgc tactaacaga ttataataaa ttgtcatcag   1860
tgaaaaaaaa aaaaaaaaaa                                                 1880


<210> 399
<211> 878
<212> DNA
<213> Homo sapiens

<400> 399
ggcacgagcc ctcccaggtc tggttagggc agttgttaca tatgaggggc gtggagtttt     60
gtcttgtatt ttggccttgt tggtaaagca ttccaaagct tcgacacacc ctcctttcag    120
cccattagga aaggctgttg attgtaatat tcacacagct ccctgggcta tggttaagag    180
ccttgcagaa ggactgggga agccctgtg tgtttgaagt attgtagcat cagaaaaaaa     240
caccggaaga aggcaggtgg ggacaaggag cctatgtctg ctccttggaa ttcctttcct    300
tactgtccga ggcaactaca gggaaagcaa agcgtgagcc cccaaatcca cacctgggag    360
gaacgttccc ctttgcaagg catgggactg gctggccctg tgtctcacgg gggctctgag    420
ttttgaggtc acactagcct cctgaggcct ggctgagagg ctgggttgg gggtcaggag     480
gccccctgta gccacgaagc tcctctgggg cattgttaaa ggttcaccct cttttttgtg    540
ggtatcctgg aagatctcaa gaaactgagc ttggaagaag agaggctgag agggtctccc    600
gccgcctgcg ttctctgcag ctatggcccc acagcctcca gtgaccatgg aggggaaggt    660
gccacccgcc ttggctgctg aaagggtgat gctcttatgc ctgagtcttg gctcctgtgg    720
tcctgcagag accctgtggg ggccgcccgg tcgtcacctg cactcatctt gggtttttcct   780
tccttttcca ccctaagctg aaggtatttt tttcctgttt tcttcactct aacttgggga    840
agaaggaaga tcctttatgg aaaaaaaaaa aaaaaaa                              878


<210> 400
<211> 2320
<212> DNA
<213> Homo sapiens

<400> .400
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aaagattgag tacatttctg ccatgatgca gagaaagaaa ctggtccatt attactcatt    120
gtgtaacacc ataagaaggt tcaaaggagc tcataccttc tgtatgttga tgccaggaac    180
tgtgtataat gaactggcct tctatagtta ggattggtac ataccgctca ttcagcaaat    240
gagtattaca gtgatattca acatgtgtcc attgactaca gcatcagaag cactaagtgc    300
tattaaaatg cagattctag gcctcatcct actcctgctg aatccaggta tctcaggagg    360
gaattcatga gactgcattt caaataaata ccccatgtga ttcttgtgca tgctgaaggt    420
tgagaaccac tgatttatta agtatcttgt gtgttcatta tgctttatcc cctctaatcc    480
tcttgtctag gactccttaa atttgagatt tagtattccc tttaatataa acattaaaat    540
tgagattagt gtaaatttgt aaagagacta tttagctaat ctggaggaaa aagagtaaaa    600
agcactgaat ttagcagcaa tagaccttcc acttggctgc tgtagtaagt aaacatttgc    660
aaccacgtgt ttggatttaa caaatgttat taggactttt cacagagact ctagagtctt    720
gcccagagca aaacattcag aaacgatcct ctctgagagt gcagggtttg ttttttgtt     780
gttgttgttt tgttttgttt tttaacctgt ctagtttctg ttaagatgct actggccagg    840
tcttcatggt cccttgacat tggcagctgt ctgttcatca cacttgggac acaagaacct    900
tccgaccaag gagcccagtg ccatgggtct ctggggccgg gcacggtggc tcacgccttt    960
aatcccagca ctttgggagg ctgaggcagg tggatcacct gaggtcagga gttcgagacc   1020
agcctggcta tcatagtgca atcctgcctc tactaaaaat acaaaaatta gccgggtgtg   1080
gtggcaggta tgggtctctg ctataccaca tgaccatttc tagcaaaggc tctgcttcca   1140
ccacaggtgg taatagggaa ctggatatat aattatgta ctccaaagta gtagccacaa    1200
tccactgcct gttcccttcc tggagcagtg tccctctttc tgattttct ctctcactat     1260
tctccaaggc aatccctgct ctctcctacc tctctaggaa atgaaacacg atttccaaaa   1320
tgaacttaat ctttcatgag aaactgagga tagagatgtc aataaggcag ccactgtttc   1380
cacctcccca cctgaagagc taggaggaca actacaaaga gcctgactgc cttctcggaa   1440
tgaggagaga ggaaaacagc aacagtatca gtatgttagc cttctacact aaatctcaag   1500
caagccaacc tttcagacct tcagtttgct catatgtata gaaataatca ttatactacc   1560
aatttctcaa gttagtgtgt aaatcagaaa gccaatgtct gtattgtagg atgtttagca   1620
```

242

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agaaaataaa aaataataac aaaaagccaa tgtctaacag ataataagag ctcagtaaat   1680
gtgattgaat tactaacaaa gtatgtgaaa gcagacgaca cagtacctgg cacactacta   1740
aactgtaaat gttttcaaat ctgaatctga gaattctgta aggttttatg taatatgaat   1800
atcattagct attatggctc tggaattttt ttttccaggt tttcaagatg gcagcatcta   1860
tgcatggtca gcccagtcct tctctagaag atgcaaaact cagaagccca atggtcatag   1920
aaatcataga aaaaaatttt gactatctta gaaaagaaat gtaagagaaa tgcccaggct   1980
gaaaatcagt tcattttatt tgcaagtctt ttgtattgcc attgtttcta agatcctatt   2040
ctttcttacc ttttctgtta tctaagatcc tattctttga gttggctatg aagaacacat   2100
ctttaaaaaa aagaatgggg gaaacaagaa cagatgaaaa tggtggtttg ttggaatatt   2160
tcggattgtg gataatttct tttgtttctt aaaaagtatc caaaagtatt gctaaaactt   2220
aaagtataat aaaaaaaaaa gaaaagaaa acagcttaac tagaacacat attcaaaatt   2280
taaggttatt tatataatca ctaaaaaaaa aaaaaaaaaa                         2320
```

<210> 401
<211> 1669
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1554)
<223> n equals a,t,g, or c

<400> 401
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cccacacgta agggacaaaa gatggacacc accgcggtgg cggccgctct agaactagtg     60
gatccccggg ctgcaggaat tcggcacgag ttagctttta aaatgtattt ttgttttttac    120
ttaagagttt taaaaagtag tcatatttta aatttacata ttgttgggaa aattctgcca    180
atggtaggat aaaacaatag atttcaattg aaatattgaa agcaacttgt gttggtaaaa    240
gatgagaagt gaaggtggaa gactgattaa aactaccaaa aatatcatag tggtaacact    300
tttattttc ttttttgtg ggggtgggga tagtaccatt ataaaaatac aaacataagc    360
tgcttttgta catcaccaaa taattcattg aaatttaagg aaatcaacca gttatgtgtg    420
tacacacaca cacacacaca cacacacacg atctcataga gtgaagggtt aattggaata    480
ctgactgagt gcaatgtaca agaaaatgta cacactgaat acaaacaagg gaaaaaaatc    540
aactttgcct aggagaataa taaatataat tataggaagg aggggggaca gggtaggtgt    600
taaaaaggag tttcctggga aaataaggaa gtgaagaaag gcattccagg cataaaatat    660
gcttgctatg tgcaaaacaa cagtgggaaa tagcatagac tcttccatgt acatactgca    720
agtgggtatg tgatggtgga gctacagttg gaaaggtagg tagggtcgt atcatctagc     780
ccgatttact agagtttaac tttatttayt catgaatagg tagatcttga cagattttaa    840
tgaggggagg gacatcaggt gccaagtacc tacaaacatt taaacaaggg aagggtttta    900
tggttgcagt gattaggaca cgtttgagga atatttagac aattaagtta gtggaactta    960
tattttata ggatgtaaat gaaggggcac agggaagcca ccgaaggtga tttctgagat   1020
tctgttttgc ataacttggt acatgatatg ccacagacat aaaggggaaa tgctttcaaa   1080
gagatctgtg tttttctcaa attttaccca atatatttgc ataaagctca atgtagattg   1140
gaactatggc aatttgattc agttccacag cttaagtaag tgttattttg ttcagttaat   1200
tgaaaatgaa actatacctg acaggaagct gattacttat atgctaatgt gacagtatta   1260
tagatcatag gacttataac acctattaat ttggtaaatg ggaaaaacaa aactgtatac   1320
tgtgaaataa gaatttacgt tatgtatata agaaatagtt gatttaggct gggtgtggtg   1380
gctcacacct gtaatcccag cactttgggc agccaaggca gctggatcac ctgaagtcag   1440
gagtttgaga ccaacccggc cgacatggca gaacccgtc tctactaaaa ctacaaaaat   1500
tagccggatg tggtggtgtg tacctgtcgt cccagctgct tgggaggctg aggncaggag   1560
aatcacttga acccaggagg cagaggttgc agtaagccca aatcgcacca ctacattcca   1620
gcactatact ccagcctagg ccacagagtg agactgtcta aaaaaaaaa                1669
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<210> 402
<211> 1668
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1553)
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243

<223> n equals a,t,g, or c

<400> 402

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cccacacgta agggacaaaa gatggacacc accgcggtgg cggccgctct agaactagtg        60
gatccccggg ctgcaggaat tcggcacgag ttagctttta aaatgtattt ttgtttttac       120
ttaagagttt taaaaagtag tcatatttta aatttacata ttgttgggaa aattctgcca       180
atggtaggat aaaacaatag atttcaattg aaatattgaa agcaacttgt gttggtaaaa       240
gatgagaagt gaaggtggaa gactgattaa aactaccaaa aatatcatag tggtaacact       300
tttatttttc ttttttttgtg ggggtggga tagtaccatt ataaaaatac aaacataagc       360
tgcttttgta catcaccaaa taattcatga aatttaagga aatcaaccag ttatgtgtgt       420
acacacacac acacacacac acacacacga tctcatagag tgaagggtta attggaatac       480
tgactgagtg caatgtacaa gaaaatgtac acactgaata caaacaaggg aaaaaaatca       540
actttgccta ggagaataat aaatataatt ataggaagga gggggggacag ggtaggtgtt       600
aaaaaggagt ttcctgggaa aataaggaag tgaagaaagg cattccaggc ataaaatatg       660
cttgctatgt gcaaaacaac agtgggaaat agcatagact cttccatgta catactgcaa       720
gtgggtatgt gatggtggag ctacagttgg aaaggtaggt aggggtcgta tcatctagcc       780
cgatttacta gagtttaact ttatttaytc atgaataggt agatcttgac agattttaat       840
gaggggaggg acatcaggtg ccaagtacct acaaacattt aaacaaggga agggttttat       900
ggttgcagtg attaggacac gtttgaggaa tatttagaca attaagttag tggaacttat       960
attttatag gatgtaaatg aaggggcaca gggaagccac cgaaggtgat ttctgagatt      1020
ctgttttgca taacttggta catgatatgc cacagacata aaggggaaat gctttcaaag      1080
agatctgtgt ttttctcaaa ttttacccaa tatatttgca taaagctcaa tgtagattgg      1140
aactatggca atttgattca gttccacagc ttaagtaagt gttatttgt tcagttaatt      1200
gaaaatgaaa ctatacctga caggaagctg attacttata tgctaatgtg acagtattat      1260
agatcatagg acttataaca cctattaatt tggtaaatgg gaaaaacaaa actgtatact      1320
gtgaaataag aatttacgtt atgtatataa gaaatagttg atttaggctg ggtgtggtgg      1380
ctcacacctg taatcccagc actttgggca gccaaggcag ctggatcacc tgaagtcagg      1440
agtttgagac caacccggcc gacatggcag aaccccgtct ctactaaaac tacaaaaatt      1500
agccggatgt ggtggtgtgt acctgtcgtc ccagctgctt gggaggctga ggncaggaga      1560
atcacttgaa cccaggaggc agaggttgca gtaagcccaa atcgcaccac tacattccag      1620
cactatactc cagcctaggc cacagagtga gactgtctaa aaaaaaaa                   1668
```

<210> 403
<211> 1677
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (91)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (99)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1155)
<223> n equals a,t,g, or c

<400> 403

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aaaaacaatc ctcccccaac cctggccaac aaaaactgan gggccaaaag gaaagggcct        60
ggggtttttt caagccttcc tgggaacccc ngaggaaana accccccaacc ctcactccct       120
cccttcccccc cagtaccatc cagacctggt ttaggaaggc catcccccag aaggggccag       180
```

```
ccctcatgcc ccccggtttc cagcccccta aaggtaaatg aattgtcctt gaactcctgc    240
cttggcattt cgcctcggaa tcacggcaga cttggagtgt ttccttccaa ggcaggcatc    300
ctgccttatg agccaaggtc aaagattttt caaaatattg tgcattaatt cattaaagct    360
actgttaaat atttgctgtt tttagattgg cgtccgtgct aattctgcag ttgtagcact    420
gtatatttta tctcatttct gtgccaagaa agttcatctt tatgtttttc taatacacaa    480
tcttgatcat gtttccaaaa taaagcttca gctccttggt caatagaagt aagggtgtag    540
ccatccaggg tctcccggct ctaggcagac cggatcccgc ggttcatccc atggttgttg    600
aaatgtacct cgatcagtca tctctggtat tcctcactct ggccatgagc cattgccatc    660
ttatgggccc gatttgggta ctctgaatta tgtcatggag tagacagtta cttctaaatc    720
ccagcaacca agttgcgtat ccttccttat agctagtttc tatagagaag tgaaaaagaa    780
atctgggctt ccttaataag atagttgagc ctatgacatt aaggagcagc gctgctggcg    840
gaagattcta gattcactgg gtggtttaag agacccaggg atttagttct tactggtgca    900
taagtgtttt cccatgctaa ccggaaaacc actcacccag gcttccccca cttcccctca    960
aattttctca gctctgccgc tggtctccat gaacggcaag gggaaccacc actcattcac   1020
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acggaatggt ggatcgtaca tttgcaccca gagctactaa acgctcagtg accccagaga   1140
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ggactcatcc taagaagaat gttggcctct cttcatccct ggcttagccg tcaggtagaa   1260
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tggtaacccc actaggggc gcccatgatc ggctcccagt gcacccccctt aagggtaagc   1380
aggccrcata tctagagtct gatagtctgt gtgtacataa ggtctagaag tctgtggaaa   1440
cgccctgaaa cytgtagtat tatcttaact accctcttat gttaaggttt acataatagg   1500
attttttaaac aaatgtgttt aattttttaa gatctcttgt attaaaattt tcttttggaa   1560
taagctgtgg aaattttgtt acaacctggt tgagatcaac ctctttacaa tgacacaaat   1620
tgtgacattt tataaattag atacttcagt gaaaaaaaaa aaaaaaaaa actcgaa       1677
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<210> 404
<211> 992
<212> DNA
<213> Homo sapiens

<400> 404

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tcctcccctc agtcttctcg cagctgctat ccttaggggc acctgggagt gaatgaagct    120
gcacgaggtc cgcgagcctc tgcccagccc ctgtccctgc agcctaggat gcaaagggag    180
gctcagaacc caggtcgccc tgactgtggc cttggtaaag tctggaaaca gtcctcagcc    240
tctgatatgc cagatatccc cagggctgct ggttccgatg taggaactgc ccagggtctg    300
cacgctcggc ccggtccatc ctaccacggc cgccccctga ggggcccagg gcagcatctc    360
ccagccccag gggcacccca acctgctgtg tctggggaag tggaaagccc ggatcctcca    420
gtatgggggc ggaactgccc ctaccaccaa tcccctaatc caaaggcaca tgtcaactaa    480
aagataatgt ggggtctcct ggtttgagtg ttccctgggc tgcgccttct caacatccag    540
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cacttctcac cacagaactc ctcctaatgg ctctgggggt cgcatgggcc acagtccacc    660
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cccactggag ccacggcctc cctcccactg cacactccca gcactgagct ggggagccag    780
ggcgcctacc tgtcccgcca gccctcccac ccacctcagc cccccaccc acctcagccc    840
caagacacac acaggccggc ctggggctgc agactgagtt attttatttc gctatttcca    900
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```

<210> 405
<211> 2150
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>

245

<221> SITE
<222> (1984)
<223> n equals a,t,g, or c

<400> 405
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ctgctacgaa gcgagcttgg gaggagcagc ggcctgcggg gcagaggagc atcccgtcta   120
ccaggtccca agcggcgtgg cccgcgggtc atggccaaag gagaaggcgc cgagagcggc   180
tccgcggcgg ggctgctacc caccagcatc ctccaaagca ctgaacgccc ggcccaggtg   240
aagaaagaac cgaaaaagaa gaaacaacag ttgtctgttt gcaacaagct ttgctatgca   300
cttgggggag cccctacca ggtgacgggc tgtgccctgg gtttcttcct tcagatctac   360
ctattggatg tggctcaggt gggcccttc tctgcctcca tcatcctgtt tgtgggccga   420
gcctgggatg ccatcacaga ccccctggtg ggcctctgca tcagcaaatc cccctggacc   480
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ttcctcatct ggttcgtgcc cgacttccca cacggccaga cctattggta cctgcttttc   600
tattgcctct ttgaaacaat ggtcacgtgt ttccatgttc cctactcggc tctcaccatg   660
ttcatcagca ccgagcagac tgagcgggat tctgccaccg cctatcggat gactgtggaa   720
gtgctgggca cagtgctggg cacgrcgatc cagggacaaa tcgtgggcca agcagacacg   780
ccttgtttcc aggacctcaa tagctctaca gtagcttcac aaagtgccaa ccatacacat   840
ggcaccacct cacacaggga aacgcaaaag gcatacctgc tggcagcggg ggtcattgtc   900
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<210> 406
<211> 939
<212> DNA
<213> Homo sapiens

<400> 406
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ataattggcc atgtactgag ctgacttaga ccgtgactaa taggttttca gatggttctt   240
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agtaatttga taaatattaa aatgcttgta aacagrtatt waycataata agaaaaaaag   660
gcmgcmatat aatatctaaa ccctaacagt cattctccag agatgctgtt ctttgtacct   720
gcaatgtggt taagaaaagc attttatttt tctttaataa ttatacatta acatgtaaaa   780

246

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atcccatcag agtcccagca cagtggctta tgcctagctg taatcccagc actttggtag      840
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<210> 407
<211> 641
<212> DNA
<213> Homo sapiens

<400> 407
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ggccttggcc tttggccggc acagcctgag ccccttggca atacgggcac gagcacgctt      300
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gatcttgggc ttaacctcct tgggctttac gagggccttg atagcctcgg cacgtgcact      420
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cggggtttct tgataccatt tctgtgccat tttcgggact ggttgtgtgt ggtgtggttc      600
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<210> 408
<211> 883
<212> DNA
<213> Homo sapiens

<400> 408
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tcgtgacctt ggttagagtg atttcaacca tcataggtgg aatggccgac cagggtgagg      300
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ggccttgggg tgaggggagt ggacagggag agggcagtag ctgggagggc atgaggtcca      420
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tgttcaaatg ttcttctctg agagcaagga tggagcgggg aaggtctgaa atagagtaaa      720
aatgggggggc tgggcacggt ggctcacatc tgcagtccca acaccctgga aggccgagcc      780
gggcagacga cctgaggtca ggagtttgag accatcccgg ccaacacggt gaaaccccgt      840
ctccaccaaa aacacaaaaa aaaaaaaaaa aaaaaactc gag                        883
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<210> 409
<211> 1350
<212> DNA
<213> Homo sapiens

<400> 409
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tataaatgaa tgcctcagtt ctctgctacc ctttttcacag ctttgtactg tttgccttat      180
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cagcgagaca aagtgcatgt ttttatcgag taccctgtgc accacattat atctggcaat    720
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atcaaataaa ccagtgtagg atattaagac tatcaattgg tgggattagg cttgacattt   1140
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<210> 410
<211> 2541
<212> DNA
<213> Homo sapiens

<400> 410
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tattctgaaa ggcaataaca tgaagcaagg caaaggaggc actgatggtt tagtatacta    180
cataagggat ttttttgttc tattattaag aaaatctaga cctgaaatgt tttctcaact    240
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tggttctatt aatttgttaa gtgtccatcc aggtgggcct acctgattcc acatatataa    360
gtacatatct gcttataaag cgctgtaaat ggcagcaagg ctgttttttgg agaagagttt    420
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tatttcagat atattttctc ctttcatctc ctctcactac tgcagagtcc agtaatacct    540
agcataggat tctgtcctgt gtcaaatggc taaaataaat ttttgcccca atagacatgc    600
tgcctcattc aaaagagctg ccgctgtcat cttgaggttc caggtagtga gagaagaaac    660
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tgaatgtttc ccataatgta aaagaagaa attaataaaa taattaatgc actgctaaaa   2520
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aaaaaaaaaa aaaaactcga g                                                    2541

<210> 411
<211> 647
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (594)
<223> n equals a,t,g, or c

<400> 411
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ttaaaaaaaa tgtgttctct gtgtcatctc tgtgcacccc ctcccactat tcctctcaca      180
cgctgcactt tttttttttt tttaaagctg cattaatagg ctgttatatc ctttgaaata      240
ccacaggtct tgagagggat gaatgatgaa atgtaaagat cagtgattga gcaggaatgg      300
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tctgatctct ctttcttttc cccacatttc ccccttttct attcgacaaa accgccatcg      540
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<210> 412
<211> 1203
<212> DNA
<213> Homo sapiens

<400> 412
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<210> 413
<211> 1561
<212> DNA
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<220>
<221> SITE
<222> (1507)
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249

<223> n equals a,t,g, or c

<220>
<221> SITE
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<220>
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

<400> 413
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<211> 2071
<212> DNA
<213> Homo sapiens

<400> 414
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aaaaaccaaa  acctttagt   atatgaattt  actggcttaa  aactataaat  attatagttt  180
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250

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ggcttctggc tataggctgc tcaggcctct gcttcctgca acagccgttc tgggtgaggt     1740
cttgtggacc tttatcattc ggccctttgt aaaaattgat gtctacaaag aggagaaagt     1800
ggcaacaatg gccccagccg tgtcccccag ccagggcggc cccctcccc tgcccagccc     1860
tccttaccca gcaggcaggc aggtatgcat gcatgtgtgt taacttagtg cctcctgggt     1920
gtgcatcagt gcacagttcc tagactaaca taaagtcaca tataggttgt gtttgttctg     1980
ttgagttgag catgtcttta tcccagctct catttcccac aatgagaaag cattaatgtt     2040
cggatttagt aaaaaaaaaa aaaaaaaaa a                                     2071

<210> 415
<211> 990
<212> DNA
<213> Homo sapiens

<400> 415
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caaagcttta taacttactt ttgtgaatga gattcttttt atttccttac tactgtttca      180
ttctttcctg tcattcaaaa ctcaccttct tcggtatgtt ctttctttac ctctgtccgt      240
tcagatcagc tcttgattct ttaggaggct tattacagtg ggtatgcctc aatatagtaa      300
tacctcatgt agctgactgg gaaactctct tattcaattg gtgaaaaatg gatgttctca      360
gcatcagaat tttccacctg ttggagttat accagttaag aaataaaaga gtccaagaag      420
ggatgttcca gatagggtg ccccacataa cacagaagga taagagttcc tagaactctg      480
actcaagtct gcaaagataa attaattaac gtatagctaa tcctacattt aaaaagaaat      540
tgttgagggt ttgttttttt ttgtcactaa gttccagttt aggagctaac acattcaaat      600
caaatgttcc ttaaaagaag ctttataaaa atcagatttt ctctgattat tgcaattaag      660
ggttaactta aagaaaaaaa attaatttcc ctaagaattc cacaggcttc cacggacttc      720
acgtcattat tggctcaact ttcctcacta tctgcttcat ccgccaacta atatttcact      780
ttacatccaa acatcacttt ggcttcgaag ccgccgcctg atactggcat tttgtagatg      840
tggtttgact atttctgtat gtccccatct attgatgagg gtcttaaaaa aaaaaaaaa       900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa       960
aaaaaaatct tctatagtgt cacctaaaac                                       990

<210> 416
<211> 1780
<212> DNA
<213> Homo sapiens

<400> 416
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gttaagtctt agctctctaa gtcgttgtaa gctttatgtg tactggcttt gttctttgat      180
tttatttcat gggaaataca aacaattcag tgcatataaa tactggaaga agttgagttg      240
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251

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aattgcagac actaatagtc gcagcagtgt cattagtgct gcatccgaag acacctcacc    300
agggccctcc agcgtcctgg cttgtttcgc tggtcgccat ggttgttagt gcagacataa    360
gctttgtgag gctgactgat ggcagatgga gggacccggc tgctccccac tctaacctct    420
agcataagga actggctgga ggataaatgg gttaagcatg cttttaatgta catttaatgt    480
acatttctat tctcaaaaca tgttgattat tttttgcct tgatgaaaac aataatccta     540
taaaatatta attgcctgct ttagaaggaa aacttctgaa ctggaagcaa ctttcgttag     600
ctatagacct ttaatgaagg cagaatttct tatataaaaa aggagctagg aaagtagaag     660
tgtaaataga aatatagttc atcaacatta ctatccactt ctgatgtgga cattaaaggg     720
atattaatct tttaagtcca gaggctctcc taggtaagtc ttatgacccc tcagcttaaa     780
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gctttccata tgccaggtac tgtttaaggt gctataatac ataattctca agacaaacct    1440
agcagataag aagaatttta tagacaagaa aactggccgg gcgtggtggc tcacacctgt    1500
aatcccaaca ctttgggagg ctgaggcagg cggatcacct gaggtcagga attcaagagc    1560
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gtggcacatg ccattagccc cagcttctcg ggaggctgag gcaagagaat cgcttgaacc    1680
cagcagacgg aagttgcatt gagccaagat catgtcatag cactccagcc tgggtgacag    1740
agcgagactc catctcaaaa aaaaaaaaaa aaaaaaaaaa                          1780


<210> 417
<211> 869
<212> DNA
<213> Homo sapiens


<400> 417
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tgttcgtgga tgtttcttgg tttctggtct ttaccctgct cccctaggga gcttcatgag    180
aatgtctaga gctgcacctg gtgcttggta gatgttccat aggtgtttgt tggaggaagg    240
aatggatgag aatgagaagg gagggagcct ctgtgcctgc ccctctgca gaggaaaccc     300
tgctgcggtg cagagacctg gcctcctccc tgcgcctcct gcgggccgac tgcctcagca    360
cgggcatgga gctgctccgg cggatccagg agaggctgct tgccatcctg cagcattctg    420
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ccaacatgcc tggcagtcag ccccaggcct cctcagggcc agaggcagaa gaggaggagg    540
aagacgatga ggatgatgtg cccgagtggc agcaggatga gtttgatgag gagctggaca    600
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atgaggaaga ggatgaagat gaggcctatg actgaggggg cagatgcagg aaacacctag    720
agcagcccca gagtcacggg gctgaggggg cgggagctgc ccctgtcata gggaggggga    780
ttcccagcgt ctgtagtgct tcctgtttgc tgaataaagg tctctttctc acaaaaaaaa    840
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                                       869


<210> 418
<211> 929
<212> DNA
<213> Homo sapiens


<400> 418
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ttttgactgg tattaggtgg catgggttgg tttttagtca attccagaat atcttcttac    180
attgttttaa tgtaaagaaa atgaaaattt gatgcttctg atctttccta atacctctat    240
ttagagcaag atggagcatc tgtctccttg gatcctttat atgtctagct acattgtgga    300
tgtttgatag aaataatacc atgcagtata gtctccgccc cgacactgaa aaaaaaaagg    360
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aggggaaagta tgtagaataa aaagacaaac agtgtaacga gctttatttt ataacactgg    420
aacattgaac ttatctgttg aggtggtact aagtaacata acaacttcaa aaacctggac    480
ccggcaggca gctaatttag ctacttgaaa atcactgggg aaaaggaaat agatgctaag    540
attactgaaa ccagcttaac acctgccaag ttacatcgct tttaaaaaat gctaggaagg    600
cccaggcacg gtggctcaca cctgtaatcc cagcgctttg ggaggccaag gtgggcagat    660
cacaaggtca ggagattgag accatcctgg ccaacatggt gaaacactgt ctatactaaa    720
aataaaaaaa attagccagg cacggtggca tgcgcctgta gtcccagcta ctcaggaggc    780
tgaggcagga gaatcgcttg aacccgggag gcggaggttg cagtgagccg agattgcacc    840
actgcactcc agcctgggtg acagagcaag actccgtctc aaaaaaaaaa aaaaaaaaa    900
aaaaaaaaaa aaaaaaaaag ggcggccgc                                     929
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<210> 419
<211> 1759
<212> DNA
<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (896)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1747)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1748)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1754)
<223> n equals a,t,g, or c

<400> 419
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gtgatccgca tctccatcaa ttagaacact ggaaaagatg ttttataaaa gaggtattta    180
attttgtttg taggattaac tcatgcaaat aataaaaaag atatcctgtt ggttcaatag    240
tacactgtct cctttaagga aggaagcgtg atgaatgaat gatgtgtaga cttgagggat    300
gactattaaa ggggacgtag gatgaagaga aagaacctac agatgacaat gaatgtaaac    360
ttatttntct tcatgtgtaa gcagtgtgct cgctggtgat atccagatcc taacaagatt    420
acttggttag ctggttagga ccagtaactg gattgcgacc actatgataa tattttgaac    480
caaatgttaa tgcttgatgc agaattgtaa agcagcatct ggttcctata tagccttaag    540
gattaatttt agtgatcctc aaggaattaa atagggaatt tcagaaatgt agactgcaaa    600
ggcagtatac aggaaaaggt ggagtgggtt ttgtttatga gggtgtctga aaactaaaat    660
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ataatggagc ttttaccaaa gatgtatgag aagtgtaaga ctataaaaaa atgaactatt    780
caaagtaaaa ctcttaacaa acattttact taaagcagat gcaaagggt attctcatgt    840
aggctcctgt tggtgcagag ggattttttt gatttcagga tacaactaaa gtacgnagtt    900
ctcagtttca ctttagtaga aagagctcta gaaatgaggc tgataaacac atctaagaac    960
actggttgct ttctaaaatt tccaaagctc caccataaat gtaattttta gtgtttcaaa   1020
tgattgcatt ttaaagtata taaatatggg ttatccaata tcaatgctat agtaacatcc   1080
tgaaacaaaa caagcacaaa ggtataaatg cctaaactgg aggaaacttg aaaccctcat   1140
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gttaaatctt aaatgtagta tttctaactt gtgaagacag attggtaggc agccattttt   1200
ttgtgtctta aaataactgg gggcatagtt aaaattttat acatcaagtg attgctatta   1260
ttgaatgttg caggtgagat gtggttattt ttagtttatt tgaaatgttt gactggaaag   1320
ggggagaggg gaagcaaata tttgaaattt ggaaaaccct aaaccttttg gtaagaaatt   1380
gtaattttca cttaaaattt tctttaagga tataagaggt ttataattga tgtagttaaa   1440
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agaattttaa aaataagatc ctgaagttgt ttaattgcat ccatttctgt atttatgtga   1560
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ctgtagactg tgatctcccc aaactaaaaa gtacagtact tggaattgtg ttctttatgg   1680
ttgtagtgtt ggtaaagcac taatatgcag aaaataaagg aattacacag tgmaaaaaaa   1740
aaaaatnnaa aaanaaaaa                                                1759
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<210> 420
<211> 1718
<212> DNA
<213> Homo sapiens

<400> 420
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tgcagcgaga gttaggggcc ttctcttttg catcttcatt gcactcagac atctggtact    180
ctgtgattat cacacttatt aatgctctca agatagagat aaaatcttat tcatcttttt    240
gctctcaggc attagcacat ggggagttct cagaaaatac ctgtcttata ccaggaatta    300
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ctgcagagga gaatgggaaa tgaaggtcag ataagttacg tgagggatct ctaaggccaa    420
gagaagccat ttaggtttga tttggttgga aaatgagctt attgaaagtt taaggcaagg    480
gactagcatc atgaacacat ctttttaggg aagtgtgtct tgtggtaagc tgctggctgg    540
tttaaatgca gcagaatatt ccattgggga tgccagctgg gagacttgcc acagttgcag    600
cctgcagcag aaagaccctg ggccagaatg ggttgtgcca tctgtcacca gatattgcca    660
aggtagatct ggctgacttt gtgggacagc ttgtttctca ataatcactt tgcaggcact    720
cttgaggctg tgagcatgct cccagaagat agcattactt ctctctcaga gcaggctcct    780
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caagaatttt ctaatgagca gatagaaaag agcaggtagg tgagaagttg gtattagaaa    960
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caaaatatgt ggagcaaata atcaaatgac atggacttac cccacaatta gggacggaga   1080
tgaggaaggg ttaggaatag tttctgttag aatggtaggg atggaagaca attgaaaatt   1140
aaagagaaaa taaatggaga ggaaatctag gcagcagcca ttcttcattc tggggaagg   1200
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tcaaagtgtt ttcaatatca tgttgactga cctgtttacg tttgaaggca gagaagatag   1320
agccagtaga aggagagaaa aatcaaagct gttttacgga gttgtgaaag agctggataa   1380
ggacaagact aaatgagtta tttttaggcc aggcatggtg gctcatgcct gtaatcccag   1440
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ggggggcgga ggttgcagtc agccgagatc atgccagtgc attccagcct gggcgacaga   1680
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<210> 421
<211> 2927
<212> DNA
<213> Homo sapiens

<400> 421
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aagtacccac aaagaagtga agtctcatct taaagaaatt caaagtgcat ttgtttcagt    180
tctatcagaa aatgatgaac ttagccaaga tgttgcatca aagggscttg ggttggttta    240
tgaactaggc aatgaacaag atcaacagga attggtttct acacttgtgg aaacacttat    300
gactggcaaa agagttaaac atgaagtttc tggagagaca gtggtatttc aaggggagc    360
tcttggcaaa acaccagatg gtcagggcct ttctacttac aaggaacttt gttctctggc    420
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aagtgatctt agccagccag atctggtgta taaatttatg aatttagcca accatcatgc    480
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gagagcagct ggctccttt ctgcctcagc tagttcctcg actttatcgt taccagtttg    600
atcccaacct tggcattcga caggccatga caagtatttg gaatgcgttg gtcactgaca    660
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gcaatatktg gcgarttcsa raatccagct gtttagcttt gaatgattta ttgagaggaa    780
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<210> 422
<211> 1677
<212> DNA
<213> Homo sapiens

<400> 422
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ctttgttaaa actctatgct ggtcattccc ttcaggattt ggcactcacc aacataccct   180
tctttcaagt gaaaaggcat ctcttttaat ggtcctgacc tttggaatag gaagcatgta   240
ccctggacag agcacttcaa actagaggaa ccataaatcc atggctaacc ttgacaaata   300
cactgaaaca ttcaagatgg gtagcaacag taccagcact gctgagattt actgtaatgt   360
cactaatgtg aaatttcaat actccctcta tgcaaccacc tatatcctca tattcattcc   420
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taaagccatc attttcatga tcaacctctc tgtggctgac cttgctcatg tattatcttt   540
acccctccgg atttactatt acatcagcca ccactggcct ttccagagag ccctttgcct   600
gctctgcttc tacctgaagt atctcaacat gtatgccagc atttgtttcc tgacgtgcat   660
cagtcttcaa aggtgctttt ttctcctcaa gcccttcagg gccagagact ggaagcgtag   720
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ttacagatgt aaataaaagt tgaatagttt accttaaatt tttttcaata agtaagttat     1620
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<210> 423
<211> 1343
<212> DNA
<213> Homo sapiens

<400> 423
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cccagaagag aggagtttgc tctgaatttg taaataagtc ttccccattc ctcatactcg      180
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ttcttttttct tttaaatttg ttgctaatct ctgataatga agattcttac tctgattctc     360
agctgagctg tgagggcttc cagggaaaat ggaacaaaat ggtgttctta ggtaatgggt      420
tgtagatact gagtctctctt ttccttttct gacccttctc gaggacattt gctttcctca     480
cacttttgta gtctctctttt acatattact atatggaaat gaattgctct gtgctgaaat     540
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ttcatgagaa ctccagaatg agtgttgacc actgaagcat ctttttaagtc tgtgttccat    660
tgtgccattc aggtttgctg tcacatatgc atcatctgaa atcatttgaa attttttgtac     720
aataaaatat cctggatttg atcctgaagg aaactagtaa gatcagatttt ttgggtcatg    780
tctgttgtat tttcagtaat gtgatttcag atggtcatct ggattctccc acttctctac      840
tccattattt ctctactttt ccttccagca aacctgaaac gtgagggaga tggattaatg      900
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aatttgggtt cttgagttgt tttggagtaa tatcccacaa ctggggtagg aagctcagga     1020
cttttttttctt taaagctagt catttcaaaa gcatattgta ttttttttgaa tgactacagt   1080
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ttagaaatg tcaagtatta taagctggta tttaagatgc ttgtaaatac tatttatgtt      1260
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<210> 424
<211> 1523
<212> DNA
<213> Homo sapiens

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taaaatgatt ctcagttagc attttagtaa cacttcaaag gttttttttt gtttgttttc      240
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tattttatttt tcttgaatac tttttttcata gttatttgtt taaaaagatt taaaaatcat    360
tgcactttgg tcagaaaaat aataaatata tcttataaat gtttgattcc cttccttgct      420
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256

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ttaaaaggct atagagtcca aaggaatatt cttttacacc aattcttcct ttaaaaatct    540
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aggttcttaa tatgagattt aaaatcttaa aatgtttctt attttcagca cttacatcat    660
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gtttcttgga agagatagga atgagttctt atctagtgtt gcaggccagc aaatacagag    960
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aaattatttc cattcagtga tgttggatgt atatcaatta tttagtaaat aatctcaata   1440
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aaaaaaaaaa aaaaaaaaaa aaa                                           1523

<210> 425
<211> 1691
<212> DNA
<213> Homo sapiens

<400> 425
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ttgtgggtgc cactgcrgca gctgctgagt ctcagtggtt tctagtcttc accaagttct    180
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gctgcttctc cttaaccgat ctgctatctg tattccaggg gcaccccagg gttagaggta    300
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aagtactaac cacacaatta caggatgcca ccaaaacctt gatatggggc tgctgcatcc    420
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ctactagtat gttgtattag tgtggtccat tcattmcaat tgatgaacca ctgttgatat    600
gtcattatca actaaagtcc atagtttaca ttggagttca ttctttgagt ttcacagatt    660
atgggttttg gcaattacat aatgtcctaa atccccaata cagcgtcatg cgaaagagtt    720
tcactgctga aaattccctg tgcttcacca tttcacgcrt cctcctctcc tccacccctg    780
acaaccactc accattttac tacttctatc tttttgactt tccaagaatg tcctagagtt    840
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<210> 426
<211> 870
<212> DNA
<213> Homo sapiens

<220>
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<221> SITE
<222> (18)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (26)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (30)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (42)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (50)
<223> n equals a,t,g, or c


<400> 426
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atttaaacct ctttttcttt ataaatgacc cagtcttggg tatgtcttaa tcagcagcat   180
gaagaagaac taatacagag aggctgagta aacaccatgt ggggtgtttg catcactgag   240
tatcacacag ccttttcact catggttaga dacggagcag aaaggtggac agacacccca   300
gcacaaagcc gagtgaagaa ctctgaggaa ggatgcgtgc ttgggaatga tgcctcgacc   360
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acagagcaca ggagcaaaga ctggctggga ccgtgtgaaa gcagctctct gctgcctctc   480
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cctgtccctc tgggccgtcc gcccccttcg ttagaatgta actgtgtgga gtgcaggcct   600
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<210> 427
<211> 1622
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1607)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (1610)
<223> n equals a,t,g, or c


<400> 427
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cagtggaatc agattttccc tcaaagacca tgatggtatc ggactagttt tcagacactg   180
cctgttgctg tccatcagca cttggtctct tatcttcagt gagaaggtga cccgccttct   240
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taagagagtt tcagagaagc cgatcccata atccccagtg cagccagggt ttgtgtgtca    420
tcgtactgga gtagagggcc gactcttccc atgaaggtga gcacagctgt gagtgagtga    480
gctcatatct ccatttgtca gtgctggact ggtaccagat cgtaaccttc ccgttggtcg    540
gaaactttcc atctgtcgcc ctagaaaaag agaaagctta ccatcgaggg tgtggttgat    600
ccttgaagct gcttggtaaa gttatcattt cctcagtctt ttcttttgta ctcctatcat    660
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ca                                                                  1622

<210> 428
<211> 1482
<212> DNA
<213> Homo sapiens

<400> 428
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atgcagacct gcccccctggc attccctggc cacgtttccc aggcccttgg gaccctcctg    180
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gcgggagccc agcagggcct gagcagagcc tccgctgaac tgtggacccc agactccgag    480
cccaccccaa ggccgctggc actggtgttc aaaccctcac cacttggagc cctggagctg    540
ctgtcccccc aacccttgtt tcatatgccg cagacccata gccgcctgca aggcagagag    600
gacacaggag agccagccct gagtgccgac cttgggtggc ggggcctggg tctctcgtcc    660
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ctttgaaaaa gttccatgac tcgaatatct gaaatgaaga aaacaaaccg actcacaaaa   1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa aa                       1482

<210> 429
<211> 1041
<212> DNA
<213> Homo sapiens
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259

<220>
<221> SITE
<222> (660)
<223> n equals a,t,g, or c

<400> 429

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atggatcctt cagccttctg cccagggggct gccagaactt tgcttcatag ctagagacca     180
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aaaaaaaaaa agggcggccg c                                             1041
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<210> 430
<211> 1783
<212> DNA
<213> Homo sapiens

<400> 430

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tgtaggaagc atttatttcc aagtttatta tcccaagaa tggtatagat gaatatacaa      1500
atccttgggc atatccacac caaaggctat atgaattcag agatggctta ctaaacaaga    1560
tacagaagca aatgaggaca ttttggcaga catctttgta gcattccaga atcatagaat    1620
attaggattg aaagtgtcct gaagagatta ttctgtttaa cctcttgatt ataggctcag    1680
tttcattcaa taaacataca gcgaacttct ggaatgtgac agggattagg ctgggattag    1740
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gtgatgggta tgtttaggga ggggaaatga aaaaaaaaaa aaa                         1783

<210> 431
<211> 2208
<212> DNA
<213> Homo sapiens

<400> 431
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ggacgtgttg ggttttttctt ccttacacta tattttggct gcacacatgt ctttaaccca      180
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cggtcctctg ccctgatctg tgtaactctt atcttgggta cttgagcaga cggtatattc       360
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gaatattaat cttgtacgct tggattgagt tatttaattt ttttttcttt tgcacatttt      480
tcttgtatta agattgctct tcccaagagc cacaagttcc tggttttagt aaacccagct      540
gcctgcattg cctgggacta gaggctgggg aggctaccat gaaacaaagg tccctcccctc      600
cctctgactc tttgcccaga cctctttagt ttgggggatc ctcctcactc tcctgaagtg      660
tctcaagtat accagtggga gtgcarggga ggagcacagg ccttcagatg gggcttccca       720
cgtgtagcta ctgatcccat atttcctact caccttccaa atggtgcgac ccaacttcat       780
ttgtttactt gaaaattccc cctcgaggtt gagagaacct ctgaggtggc tgtatttttct      840
cctaagcttg agatagggggg ctgtggtcct tcctttctcc tgaggaraaa gtccttgctc      900
tggtgacctg taagttgcag aggagggtgg agtgagagtg tcatgtattg ggatagtcag      960
ggatccctgc ctttggcctt tcttcttctt cttcttcctc ttccatagtt ggatcatgta     1020
tatttttactt ctaaaggaga gaatgtcaaa aagttctgta ttttttttata ttctatatat   1080
taggtaggtc aatcttaatt ggtctcaaga ggaagaactg tctgtcattt cggtaagtag     1140
gatactgtga ggaagaccaa aaagagatat ggatgcttcc tcgctcagga ggcctgagct     1200
tggtcctttt cctctctgct tggattctgg accaccacct gggaccaacc ttcagctctg     1260
gaaccttcat aaagcaggtc agcgtggcct gattgtccca ggacctgaag ggagcaagga     1320
tggcctcagg gcctggtgaa gtctgctact ctgtccttac tgctgaacat cctgcttgta     1380
tcaggaaact cagaagcagt ttgccttgtc aaattcaatc tcaatggcca ttgtccacat     1440
aactgatcac ccatggctgc ctctcctatt atctattatc actgaaactt agtagcctgc     1500
tyttttttttt tttttttta gagctattgc gtatcttccc tgtttgggat ccttgtacct     1560
ggtttgggtt ttcccttcct tgtgacaatt ataatccaga tgcctcttct ttctgtttga     1620
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gtaaagccca cctgtttgga tgggagtaga ggaagttggt gtagaccagc tgtggagctg     1740
aaggcacagt ctgccccacc cccacctccc cactgtggtt agtcagaggc atcctgctcc     1800
aagctctgct tttccttcct ctgaaacaat gccattcttg cttctattgc tacacatctc     1860
cttctggctc aggtgaaatc catgcccttc tgcttataga cctaaagttc aggtacttat     1920
tattggccat tgatcttgaa tttgccctct cctagtgctg cagtcccact tcaaagccat     1980
tttctgagga ggatggttta ggtctggcaa ttgtccttga aaaatcccac ccatgttgta     2040
ccaccttggt gagtcatatg ccactcatca gcttgggaat gatggctgcc aactcccaat     2100
ctcccaggaa ggcagggggc agaatctttt tttcacttgg cctgctacct ccattaaaaa     2160
accattctct tacagtttaa aaaaaaaaa aaaaaaaag gcggccgc                     2208

<210> 432
<211> 1097
<212> DNA
<213> Homo sapiens

<400> 432
tcgacccacg cgtccggtgc agccgagtca ctactgcctg cctgcctgcc tgctacggct        60
cagcagcagg tacgtaccca accatgggct cgcaggccct gccccccgggg cccatgcaga      120
ccctcatctt tttcgacatg gaggccactg gcttgccctt ctcccagccc aaggtcacgg       180
agctgtgcct gctggctgtc cacagatgtg ccctggagag ccccccacc tctcaggggc        240
cacctcccac agttcctcca ccaccgcgtg tggtagacaa gctctccctg tgtgtggctc        300
cggggaaggc ctgcagccct gcagccagcg agatcacagg tctgagcaca gctgtgctgg       360
cagcgcatgg gcgtcaatgt tttgatgaca acctggccaa cctgctccta gccttcctgc       420
ggcgccagca cagccctggt gcctggtggc acacaatggt gaccgctacg acttccccct       480
gctccaagca gagctggcta tgctgggcct caccagtgct ctggatggtg ccttctgtgt       540
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261

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ggatagcatc actgcgctga aggccctgga gcgagcaagc agcccctcag aacacggccc        600
aaggaagagc tayagcctag gcagcatcta cactcgcctg tatgggcagt cccctccaga        660
ctcgcacacg gctgagggtg atgtcctggc cctgctcagc atctgtcagt ggagaccaca        720
ggccctgctg cggtgggtgg atgctcacgc caggctttcg gcaccatcag gcccatgtat        780
ggggtcacag cctctgctag gaccaagcca agaccatctg ctgtcacaac cactgcacac        840
ctggccacaa ccaggaacac tagtcccagc cttggagaga gcaggggtac caaggatctt        900
cctccagtga aggaccctgg agccctatcc agggaggggc tgctggcccc actgggtctg        960
ctggccatcc tgaccttgca gtagccacac tgtatggact atccctggcc acacctgggg       1020
agtaggccaa gaaggaaaat ctgacgaata aagaccccg ctgccccata aaaaaaaaa       1080
aaaaaaaaaa ctcgtag                                                     1097

<210> 433
<211> 1123
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (755)
<223> n equals a,t,g, or c

<400> 433
ggctgccagc gagagccgcg ggagagtgtg cagccgagtc actactgcct gcctgcctgc         60
ctgctacggc tcagcagcag gtacgtaccc aaccatgggc tcgcaggccc tgcccccggg        120
gcccatgcag accctcatct ttttcgacat ggaggccact ggcttgccct tctcccagcc        180
caaggtcacg gagctgtgcc tgctggctgt ccacagatgt gccctggaga gcccccccac        240
ctctcagggg ccacctccca cagttcctcc accaccgcgt gtggtagaca agctctccct        300
gtgtgtggct ccggggaagg cctgcagccc tgcagccagc gagatcacag gtctgagcac        360
agctgtgctg gcagcgcatg ggcgtcaatg ttttgatgac aacctggcca acctgctcct        420
agccttcctg cggcgccagc acagccctgg tgcctggtgg cacacaatgg tgaccgctac        480
gacttccccc tgctccaagc agagctggct atgctgggcc tcaccagtgc tctggatggt        540
gccttctgtg tggatagcat cactgcgctg aaggccctgg agcgagcaag cagcccctca        600
gaacacggcc caaggaagag ctayagccta ggcagcatct acactcgcct gtatgggcag        660
tcccctccag actcgcacac ggctgagggt gatgtcctgg ccctgctcag catctgtcag        720
tggagaccac aggccctgct gcggtgggtg gatgntcacg ccagcgcttt cggcaccatc        780
aggcccatgt atggggtcac agcctctgct aggaccaagc caagaccatc tgctgtcaca        840
accactgcac acctggccac aaccaggaac actagtccca gccttggaga gagcaggggt        900
accaaggatc ttcctccagt gaaggaccct ggagccctat ccagggaggg ctgctggccc        960
cactgggtct gctggccatc ctgaccttgc agtagccaca ctgtatggac tatccctggc       1020
cacacctggg gagtaggcca agaaggaaaa tctgacgaat aaagaccccc gctgccccat       1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa                        1123

<210> 434
<211> 382
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (55)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (378)
<223> n equals a,t,g, or c

<400> 434
attcaattat nggaaaantt gttacgcctg caggtacsgg tccggaattc ccggntcgac      60
ccacgcgtcc gcctcccccg tgtccgtatt ccttacctgc accttttcct gcaggtggga     120
ctcagggtac ttgttcagca catgtgcttt cctcttcgtc ttctaggagg gagtggttgg     180
gtctgggctc cctgttccca agcccacgtt gtgttcatgg ctgtggctgc ctgggtgatg     240
agtgtgagtt tgcacctggg ttttccctgg gccttaagca gacagcgtca ccctcagagc     300
catcaccact gtgaatcatt tggatctttt tccatctggg cataaaattg tatgtgtaga     360
caaaaaaaaa aaaaaaangg gg                                              382


<210> 435
<211> 750
<212> DNA
<213> Homo sapiens

<400> 435
tcgacccacg cgtccggtga agctgtctgg ggaagagcat tccaggtggt gggaacaggc      60
ttggcaggtg tgaagatgag gaaggaggcc cctgaagagc cggcgggaag agcgggtgga     120
tgggaacaca gtttccccgt ccgccagcag gtggcactgt tggcccagga ctgctcgggc     180
atggctggga gagcaggtgg ggccgcgggt tctttgacct caggtttgtg attctggctg     240
tgggctcatc acaggctcta cctccaccct ctggggagat aagccctggc cgggggcaga     300
agagcagttg taatggtttc ctggctgttc tccttcccca acgggtcttg ctttcagtgt     360
ttctttgctt gctccctctc cagaggtgac ttccctcccg gtttctgggt atctgtgtct     420
ttgctctctc cttttgcttt tcttttttgct cccttggtct cttctcctcc ctctctcatt    480
gctccctggg ggggcaggtt cctgtctcaa agattaatta cttgcttttt tttttttttt     540
tttttttttg ggaaacctcg ctctgtcgcc caggccggag gttgcagtga gccgagatcg     600
cgccattgca ctccaacctg ggcgacagtg agactccatc tcaaaaaaca acaacaaaca     660
aacaaacaaa aataatactg cgatttccta gcaatgccca gtgacttacc ctaaattcag     720
tgaaagttga aaaaaaaaaa aaaaaaaagg                                      750


<210> 436
<211> 1238
<212> DNA
<213> Homo sapiens

<400> 436
ccacgcgtcc gctttccgga agggtcgact caactggatg agcatggatg tccactgctg      60
gggagagcaa agagcttgat attttaatgc tttggtttct ctcagaagaa tgaggcagga     120
agacttaacc gggctttgta aattagttaa catactattt ttttttctcc agttttatac     180
tcttctcagt ttttttttttc ttttaaaaaa tgtgcacaaa ctatttgttg cagccgtgat    240
aatattcgta gtaaagagcc aaaggtgctg cgtggctggg tctgcatcag gcctgggcct     300
ccgactgcac ggctccaact acacagttgt ttatggagac cagtcccggc ctcctctgct     360
gagagtaaaa acaggtgtga aaggtaaggc ctaagggttt cttttgtaaa cctgagctct     420
gaggctgatg gacgagtttt gggctggcct gccctcctca atacagcaga aacgcttggt     480
aataaaagtg gactcaataa tttaccttag tgttttgaca aagaatgcat tgtctgaatt     540
atactaggta gtatattcca tcaatcagtc aacaagtgtt tattaaacac ctctgggctt     600
ccctggcttt tgctatttgg tgagaaaccc aactcagtaa cctaatacct gcctttgtgt     660
gtgtgtacaa aaataaatga tgcaaaattg taagtttcaa agacttgaat aactttattg     720
gctaatatta atttagcatt gttaaccatc agattaattt taggcttggg gcagttttag     780
tgattggggg agaacaagag atggactttt gagttttagg tatctgtatg tatgtacttt     840
cttgacctct gttatatttc tccagataag tactgtttaa ataacatata aagatgtcag     900
atgagcaata gatagataag aatggtgcaa aaaaaaatca aaatatgaag ctactgagag     960
caatttctga gtctcagcat actgagtttt ggccccaaag tgcctgggga aaatggacat    1020
atcatctaaa aagctgtaaa taccagccaa caacaggaag tcttagactc ctgtcccaca    1080
cttctgagct gcaggtgtgt ggggaagccc catgccttta tctcactgtc tctatctcta    1140
gcaaggaaac ctgtttcctg actctgcaga atttcgcttt cccccttttt ccttaaaagc    1200
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263

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agagttacaa aaaaaaaaaa caaaaaaaaa aaaaaaaa                         1238

<210> 437
<211> 829
<212> DNA
<213> Homo sapiens

<400> 437
ccacgcgtcc gctaaaatac aactttatca tacaatcaaa ccaggtagtt catataaaac     60
agtgtaatac aagttttcta taaagtcatt actgttgctt aaacatattt catgcctatt    120
aaaatatatt ttctactggt gatttcaaca ttatttctca tactgacttt tattactgga    180
aatgttcctg tacatgttgg cagcagataa agattttttga atgtttgaat gccctctgcc    240
ttgatttggt tggaattttt gctaaattgg taatgttgct tgaactttat gactacattt    300
tcttttaact tttttcatgg acttccttat atgtacataa taattaaatg ttgaaattta    360
tgaaatactt ttatgaattt agataatttt taaatattgt taaaatttat tgaactaaaa    420
agtaatgtaa ataaaataat tcatgttaaa gatggaacaa aataattaac tttacatgtt    480
tggtgataca gatgcaaatg tttttgatat atggagatgt tgagtctttt gactttacta    540
aaggtgctga atagcattaa attcactatt ttcctttct gttttacttg tgaaaataaa    600
aatgcactaa ggttgggtag aagttctgtt tgcactcact aattgtgaca gacagaggtt    660
tttgtaagta tttattgtac aattgatgca tgtttatttt tagcgttgtt attgcctctg    720
gtgttaataa atgaacaaat ggctatctgg aggaacagct acaaaaaaaa aaaaaaaaaa    780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                829

<210> 438
<211> 802
<212> DNA
<213> Homo sapiens

<400> 438
cccacgcgtc cgatcaaagc ctcggtacgt ggtggctcat ccctgcaatc agagtacttt     60
ggtcgaccca tgtgaactgg tcacctaagg tcacaatttc aaaagcaccc taacatggtg    120
aaacccatc tctactaaaa atacaaaagt tagccggggg tgttggtgtg cacctttagt    180
tccagctact tgggaggctg aggcatgaga attgcttaaa cctaggaggt agaagttgca    240
gtgaaccaaa attgtgccac tatactgcag cctgggtggc agagtgagtc tccatctcaa    300
acgaagcaaa aaataacaaa aaaagacctc aaaaatgctt ttcttctcgt ataatggact    360
tccttctttt tctttctggt tcctcttcat ttctctcttt attttttattt atttatttat    420
ttatttattt tgcagtttga gtttgagata aatctaagtt ataaagttg tatttcttaa    480
tacataatga cttctgaaag atgcctttgc agcatcctat aatcagctca catcattcgt    540
ttctgtactt gtatattttc cagttatttt ccggttgacc ccagaattcg ttagattttt    600
ttaaaaaaca atttcaaaat agttgctgtt ttaaattagt tgcatccagt tcatatcaat    660
gtctgcatgc tttctagtct ttgttatta ttgaaaacct ttggtaccta aacttaagtt    720
tgattgtttc agtgtgtact tggtaaatat gtcagtggcc ttttaactaa acatcaaaat    780
gtactttaaa aaaaaaaaaa aa                                             802

<210> 439
<211> 1148
<212> DNA
<213> Homo sapiens

<400> 439
tcgacccacg cgtccgctcc tggcctcaag tgatcctccc atctcggcct tccaaactgc     60
taggattaca gccgtgagcc accaggcccg gccgagcttt tcttaccatg gtattcttgt    120
gttcttccag agatttttt aaaatgcctc ttcctttct cactccctcc ctctttttct    180
tttaacacag atgggagcat tgtgtgtgca ttgttgtata cttgctttt gcacatacgg    240
atcagggatt tctctgtttc cttacctcct gatctgcctg cgtggcagga acattcacta    300
tgcaatgact atccctgtgc tcgtcaacgt tcccgtgtga ccttgcagtt aggtgggacc    360
atgtaactac ttctggctag caaactgtga gaagtgagtt gtcccacttc ggggctgaag    420
cactaggaac ctccagctct gccacagaag ctgtgtgtca tgtggtggag cctctatcag    480
cctagatccc tgagtgatta cgtgaagccg aagctggccc ttcccccctg gcccctgctc    540
agacccaacc tatgctgaac acgtagttga gcaagaaata aacttctgtt atgttaattt    600
gtttctacat cacacagctc ctcttgatat agctggattt cttttaata gctgtgaaat    660
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264

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tcataacact ttgaatgaac ccagttcaga tgatcaaatg cttaagaaca aaaaagcatc    720
taattaaaga ataataactt taaatataca aatatcagat caatgcatct tatcccaatg    780
tgttgccacg caaatatcyg tatacataat ttctaattaa actttttaat ttttttaaat    840
ttatttttct gagatggcgt ctcgctctgt cgcccaggct ggagtgcaat ggcgcaatct    900
cagctcactg caacctccat ctcctgggtt caagcaattc tcctgcctca acctctgagt    960
agctgggact acaggcacat gccaccacgc ccggctgatc tttacatttt taatagagac   1020
agggtttcac catgttggcc aggctggtct cgaacatctg acctcgtgat ccgcctgcct   1080
cagccaacca aagtgctggg attacaggcg tgaaccactg cacccagccc agcccataat   1140
taaaaaaa                                                            1148
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<210> 440
<211> 1095
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> n equals a,t,g, or c

<400> 440
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tcccccgcgc sttgcccgat tcattaatcc agytgccacg acaggtttcc cgactgaaac     60
cggccagtna gcscaacgca attaatgtga gttagctcac tcattaggca ccccaggctt    120
tacactttat gcttccggct cgtatgttgt gtgaaattgt gascggatac caatttcaca    180
caggaamcag ctatgaccat gattacgcca agctctaata cgactcacta taggaaagct    240
ggtacgcctg caggtaccgg tccggaattc ccgggtcgac ccacgcgtcc gcaaaatttc    300
ttcagtttat tatctgtaaa ttgtacagtt ttcttttga aagttttaat attgtcttcc     360
tttttaataa cttatttttat acatattgtg cagatgtaaa tcttgtaatt aatggtcaaa    420
ctgtataaag ggattggtag tcaaaacatg tacaaagaaa tacctgtaaa actgttttgt    480
ctcatgtttt attggaccaa agttgtggtt tgtatggagt gtagtagtag tgtgtacagg    540
tagaaaactt ttaaatacag catgcaggtg tttcagttag cttgtttttca tcaccataac    600
tgcaaagatg tggcttagtt gtattgcatg cttcctataa tttaactctc cataattgat    660
gcctgcagta gtgtaaggca tttcatacta gtctcctcta gtagacctgt gacttactgt    720
gttggacata ttatttagac ttagtcatac aaagaaactt agctcttttt tcatctcaca    780
gtaaagccta tttccccagg aaaaaaataa atgcctttga atgaaaattc tgaaattgta    840
aatgtctatt ttaatattca cctatgaaag aatctgtgaa tatatgtaaa tacgtttaat    900
aaatttattt ggtcatgtta aatcattgta aaactttttt acattgctta atgttttaag    960
cttaatagcc tttgcacttt taaaataaaa accaagtatg caaatcaaag atatttggta   1020
gtcaaaataa gtaaaagaaa tataggaata ttccagtcaa aaaaaaaaaa aaaaaaaaaa   1080
aaaaagggcg gccgc                                                    1095
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<210> 441
<211> 1393
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (24)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (39)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (58)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (76)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1296)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1299)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1372)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1373)
<223> n equals a,t,g, or c

<400> 441

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tcggatgttg tgnggaattg taancggata ccaatttcnc cccaggaacc agctatgncc    60
atgattacgc caagtntaat acgactcact ataggaaagc tggtacgcct gcaggtcccg   120
gtccggaatt cccggggtcg acccacgcgt ccggggaatt cttccataag ttgggtaaat   180
tatattttta actctggcat ttgttcttat ggtgagagtt cattttttag cttctttaga   240
taaagctggc cccactgatt tggccctaag attaatatct gctgtaaagt ataggcagtc   300
tctactgtag attctgtgca gccatgcaca tatcagaaag tggtggccac aggacataca   360
cctgactgta gctgtggcta cactatggtc atcctctgga catcagtggt gagtccaaag   420
ctagttgtga ggagggaaag actatgaatg agtaatggaa tgtaggaact aatagtactt   480
gtgaactcag tagacccaga ctataggatt tccatattgc tttgaccacc tttggttata   540
atgatggaat cagaggtctt ttaattatga tggtagttcc tttggttta ttataagtga   600
ctttttttctt tctcaactga tttggtccat attcttattt cttaaactga agtagacgta   660
tagatccaca ttatatgttt cataagagtt aaattatcct tacatcctga aaatagctgt   720
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tttgttttttg tttttgcagt ggtacaattc cacagtcctg cctctcatat atttaacacc   840
tttagcccac ataattcaag aagcacatta ttaaggtgtt gtctggctct gtgacccact   900
agtatgcatc agtgaagcca gtgctaggtt tggatctggg tgtttatgag aaatgtgttg   960
atgagaaatt aagttttccc ttgatacagc aggaggattt gaaatgcgtt atcacagtgt  1020
tctcaaggta gatgcagcaa cagttgtagt aatggtagaa ttagaaaatt taatttggga  1080
atattttta agatttcagc caggcacgat ggctcacgcc tgtaatccca gctactcggg  1140
aggctgaggt aggagaatgg tgtgaacccg ggaggtggag cttgcagtga gcagagatca  1200
cgccactgca ctccagcctg ggcgacagag caagactcca tcttaaaaaa aaaaaaaaag  1260
ggcggccgct ctakaggatc caagsttamc gtaccncgng catgcgacgc catagctctt  1320
ctatagggggc accctaaatt caattcacct ggcccgccgt ttacaaccgc cnngacctgg  1380
gaaaaaaccc tgg                                                      1393
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<210> 442
<211> 1597
<212> DNA
<213> Homo sapiens

<400> 442
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tacgccgtgc aggtaccggt ccggaattcc cgggtcgacc cacgcgtccg cctgcctgca        60
gtaaaccact gcctgaaccg tgttcctagg tggtgctgat gctgggctgt ctcaaaagcc       120
cttagtctgt ttcaaagctt cctgccaatg gcaagaatgt ggatgatgtg attagaaatc       180
aaatgaatgt aactgttaca ttgccaaaat accatttagc tctcatttgg ctgctttttc       240
actttgggtg ggcattatta tcagtttgct caaaaacagt gcttatgrat ctatccaatg       300
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gacttttatt cttttaattg attgtgaggt tctaaaagag ataattgtaa aagcaacaac       420
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ccttcttccc tcccttactt tcttctgctc tttcttgttt tgatttacct ccaagtggca      1440
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<210> 443
<211> 1641
<212> DNA
<213> Homo sapiens

<400> 443
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gtgattaata gatttgcatg tacatagaag tctttgttgg ccttataatc tgctgttata       180
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atggtccttg tgacctggcc cctgttcact gcccccttcg ctagcacgag ttgctgtgca       300
gggctggagg tagctaccat ggcttgtttc aaggaaggaa actctggtac ggtggcaccc       360
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ttgttttgaa gattcactca tgttgcatgc atctgtagct tgtgcctttt ttattgccta      1500
gtagtattct gtcatatgcc tatcttacaa tttgattatc tattcacctg ttgatgaatg      1560
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267
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aaaaaaaaaa agggcggccg c                                               1641


<210> 444
<211> 1470
<212> DNA
<213> Homo sapiens

<400> 444
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aggcttggtg agaacaggaa gggaacccat caaggggcag agacactaga aagggtgtga     180
aataacatga ataactttct gacttcacca tggaccatgg aggggtggcc atccaagagg     240
gtgctgtacg aagctttcat agggagagcc actctcttgt agatctgcat aggtaaacct     300
tcccaggtga gggcatcatg gccagctttg cagtcttgga aactaagttt ttaaagagag     360
gaacacagga tccctggtgt aaccctgtgt gggaatcaca gctacttgct gatgtaccct     420
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cttggcacat tagctcaaga gttttgggtt tgacttgcct ggcaggtgga agcctttgca     780
gggagaatat taaatccaag cagcactatc tatatactga aatcgtacca ctttgcattt     840
aggtaatatg tggaaacttg caaggtactt tctcatttgt catctcattt gagtttata     900
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gtcagagtcc aagaccatgg tcatacccac cacatcatgc ttctctgtta acttcacctg    1080
gcactgggtg catcacgagt cccacaaatg aagttttcta gttkgtctyc tgtgatatta    1140
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gcattttata gggcaatgct tcccaaactt ggctactcat tagaattact gtgacatttg    1260
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tcccagagat ctgtattttt taaacatctg accattacta ttaattatga gatttccttc    1380
aactttgaaa catgcttatt tagtatggtt tctaacatat ctgacttctt gtggttccta    1440
atggtaaaaa aaaaaaaaaa gggcggccgc                                      1470


<210> 445
<211> 604
<212> DNA
<213> Homo sapiens

<400> 445
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catctccact gcaaaaaaaa aaaaaaaaaa ataagaaaga acaaaacaaa ccccacaaaa     180
attagctggg tatgatggca cgtgcctgta gtcccagtta ctcaggatga ttgattgagc     240
cttggaggtg gaggctacag tgagctgaga ttgtgccact gtactcctag ccaggagaa     300
agagtgagat cctggctcaa aaaaaccaaa taaaacaaaa caaacaaacg aaaaacagaa     360
aggaagactg aaagagaatg aaaagctggg gagaggaaat aaaaataaag aaggaagagt     420
gtttcattta tatctgaatg aaaatatgaa tgactctaag taattgaatt aattaaaatg     480
agccaacttt tttttaacaa tttacatttt atttctatgg gaaaaaataa atattcctct     540
tctaaccaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     600
aaaa                                                                   604


<210> 446
<211> 981
<212> DNA
<213> Homo sapiens

<400> 446
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268

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atttagcatt ttcaagcttc atctaagttc tagtttatgt aggtattgca ttgctggata      180
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ttgagtttct gttttctact ttcggctgtt atgaataatg tcactatgaa agtttgtgta      300
caagcttttg tgtgaatttg tgttcagctg tcttgggtac ataccttgga attgaattgt      360
taggtaatat ggtaactccg tgtttaacat cttgaggaac tgccaaaatg ttttccaagg      420
tgcctatacc attcccacca ggaatttctc cacttcctgg tcaatacttc ttaatgttgg      480
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atcagacatt tgtatgtatc ttttttggag aaatattgat ttatatcctt ttgaaaaatt      660
gggggccgtgc atggtggctc acgcctgtaa tcccagcact gtgggaagct gaggcgggcg      720
gatcacgagt tcaggagttt gagaccagcc tggccagcgt cgtgaaaccc cgtctctact      780
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ggctgaggca ggagaattgc ttgagcctgg caggcagagg ttgcagtgag ctgagatcac      900
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<210> 447
<211> 1653
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1555)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1581)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1584)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1611)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1626)
<223> n equals a,t,g, or c

<400> 447
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ggcccctgc tcctgcccca ccagctccca ttccaccccc ggccccgtcc cagagcagcc      180
caccagagca gccgcagagc atggagatgc gctctgtgct gcggaaggcg ggctccccgc      240
gcaaggcccg ccgcgcgcgc ctcaaccctc tggtgctcct cctggacgcg cgcgctgaccg      300
gggagctgga ggtggtgcag caggcggtga aggagatgaa cgacccgagc cagcccaacg      360
aggagggcat cactgccttg cacaacgcca tctgcggcgc caactactct atcgtggatt      420
tcctcatcac cgcgggtgcc aatgtcaact cccccgacag ccacggctgg acacccttgc      480
actgcgcggc gtcgtgcaac sasacagtca tctgcatggc gctggtgcag cacggcgctg      540
caatcttcgc caccacgctc agcgacggcg ccaccgcctt cgagaagtgc gacccttacc      600
gcgagggtta tgctgactgc gccacctacc tggcagacgt cgagcagagt atgggggctga      660
tgaacagcgg ggcagtgtac gctctctggg actacagcgc cgagttcggg gacgagctgt      720
ccttccgcga gggcgagtcg gtcaccgtgc tgcggaggga cgggccggag agaccgactg      780
gtggtgggcc gcgctgcacg gccaggaggg ctacgtgccg cggaactact tcgggctgtt      840
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                                   269

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ccccagggtg aagcctcaaa ggagtaaagt ctagcaggat agaaggaggt ttctgaggct    900
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atctgcaccc ctcaccctgc tggtggtggt ccttgccacc ggttctctgt tctcctggaa   1020
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cctgccccac ctctccccaa ttaagtgcct tcacacagca ctggtttaat gtttataaac   1380
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ttctatagtg tcacctaaat tccaattcac ttgggccggt ccgttttac aaccntcgtt     1560
gaatggggga aaaaacccct nggncgtttt accccaacct tttaattccg ncctttgggc   1620
aaagcnccat ttccccccccc tttttccgcc caa                               1653
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<210> 448
<211> 939
<212> DNA
<213> Homo sapiens

<400> 448

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ccacgcgtcc ggccccacag tgaacactac tctgagaaac ctgggagctc tgtataggcg     60
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gggcactgac cctatcagcc agacgaaggt ggcagagctg cttggggaga gtgatggtag    180
aaggacctcc caggagggcc ctggagacag tgtgaaattc gagggaggtg aagatgcttc    240
tgtggctgtg gagtggtccg gggatggcag tgggaccctg cagaggagtg gctctcttgg    300
caagatccgg gatgtgctcc gcagaagcag tgaactcttg gtgaggaagc tccaggggac    360
tgagcctcgg ccctccagca gcaacatgaa gcgagcagcc tccttgaact atctgaacca    420
acctagtgca gcacccctcc aggtctcccg gggcctcagt gccagcacca tggacctctc     480
ttcaagcagc tgacattcaa cccggccccc aggtctgctg ggtccccca ccccacagc       540
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gagcagttta agccagaaga ttgctgctgc ccttagggtc tcagctccct cctcaggaat    660
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ttactccctc cctctgctgt ctcacttcag gtccatgtat ttcacttttc ttaaataaaa    900
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<210> 449
<211> 737
<212> DNA
<213> Homo sapiens

<400> 449

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gtttacctca gtttatgtca ctgtcgaaga aacaaaaaat aatagcaaaa aataacactg    180
tagacatgaa gacttagaag acaaaaaaaa aaaatcaca caaaaaatct cccttgttgc      240
gattcttctg tgaaggtaca gtgtgtatgt gtgtatgtgt gtatgtgtgt gcgtgtctct    300
gtcccagacc ctgtgtcccc cacactgccc ccctgtcttc ggtgcttccc agagacccct    360
ctgagctggc ctgtggggca cgggaagccc cctggatggg aggcggggcc acaggtcggc    420
tagagggtct ccaccaggcc cactgaacag aaccccacgg ctgccagaat gttccctgag    480
cctacactgt ggccagtggg acagtcctgg tggctgacat cagcgtccat gcttggctca    540
gggcctgggg cggggtcctg ggtagagtcc tagccccaga gccccagccc ctcatgtctt    600
gccgcccttc ctccatgtgt ttgtaaatac tctggcatcc tttggccctg agaaggtttt    660
taaatgtgtt atttacttct ctaaacatga cgattgctat aaaaataaac aaagtttag     720
aaaaatgaaa aaaaaaa                                                   737
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<210> 450
<211> 2286
<212> DNA
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<213> Homo sapiens

<400> 450

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agtagagtta tatgytcttt gacttactat gattcaagca atagattttg aagtcagtaa     180
tcgttaagct gggacatagg atgcattctc caaaaacatt aatttaatta gacattagcc     240
accctatata ttttacatag attaatataa aacatatcct cattaaaaaa tgttttttctt    300
gaatgtaaaa gatagtcttc caaaggatag aaatatttta gttccaagag aaaagccatc     360
atattacttg ggatctgtag ttttcatgcc tatgaaatat ttataatcct ccctcacccc     420
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aatgttcttt cctctaaagg catgggcccc ataaactgtg gcatctggca gcaggatgcc    1980
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cactttggga ggccgaggcg ggtggatcac aaggtcagga gttcgagacc agcctggtca    2100
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gtctcagcta cttgggaggc tgaggcagga gaatcacttg aacctgggag gcagaggtta    2220
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aaaaaa                                                               2286
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<210> 451
<211> 1875
<212> DNA
<213> Homo sapiens

<400> 451

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tggtggccac catgttctgc tgggtgacgg ccatgcagtt ccacctgatg ttctactgca    180
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tgccacacaa ggagctacgc ttcatcatct atgccttccc catgctcaac atcacggctg    720
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ccagaggctg ctcctacctg ctgaataact ataaaaagtc ttggctgtac aaagcggggt    780
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gcatgctggc atacacacac atctcatgga ggcggccctg ggctcctggc cctctacagg   1080
gacacacacc gggtcctggc cagcgtcgtg gggaccacag gtgtgagtct gaacctgacc   1140
caactgcccc cttcaacgtc cacctgcaga caaagctggt gcttctggag aggctccccc   1200
ggccgtcctg aggggggacca ggcagccctc agcagccaca ggccttccag gagctgttat   1260
cactaccagt ttctggcaca attccagcac aattatgaca attcagagaa gcaagtcaaa   1320
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agctggggct ctcagcacca aagaacgagg ggcccaggtc ttgttggcac cccgggagcc   1440
actgcccagg gtgatggtgg ccagctcagg gcttcctgcg ggtgactgtc gcccagacca   1500
ggtgccattc atgactaatc aggagcagcg ggctcaccca ggcacctgtc tgccaggagg   1560
ccacgtgtgt cctgcccacc caggggggagc tgtattttgg cagcacccca cgcttgctgc   1620
ccgagggcct cttggggcac ctaagacagc accccctttc aggggagacc atggtggccc   1680
cggccgcacc ccccaccct ggtgccacca ctgcaacttt tgtattcaca ggcatcccat   1740
ctccatcaca gataaaatct taggagataa acacattcaa aaaggaatga gataaaaaga   1800
ttaaggcaat aaatgttgat tggaacctct caaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1860
aaaaaaaaaa aaaaa                                                     1875

<210> 452
<211> 518
<212> DNA
<213> Homo sapiens


<400> 452
ccacgcgtcc ggacgtaacg gaggcaggtt ggagccgctg ccgtcgccat gacccgcggt     60
aaccagcgtg agctcgcccg ccagaagaat atgaaaaagc agagcgactc ggttaaggga    120
aagcgccgag atgacgggct ttctgctgcc gcccgcaagc agagggactc ggagatcatg    180
cagcagaagc agaaaaaggc aaacgagaag aaggaggaac ccaagtagct ttgtggcttc    240
gtgtccaacc ctcttgccct tcgcctgtgt gcctggagcc agtcccacca cgctcgcgtt    300
tcctcctgta gtgctcacag gtcccagcac cgatggcatt ccctttgccc tgagtctgca    360
gcgggtccct tttgtgcttc cttcccctca ggtagcctct ctcccctgg gccactcccg    420
ggggtgaggg ggttacccct tcccagtgtt ttttattcct gtggggctca ccccaaagta    480
ttaaaagtag ctttgtaaaa aaaaaaaaaa aaaaaaa                             518


<210> 453
<211> 1413
<212> DNA
<213> Homo sapiens


<400> 453
gccttgaggt ggaaggcggg aaaatggcgg attcctcggg gcgaggcgct gggaagcctg     60
caaccggccc cacaaattct agcagtgcca agaagaagga taaaagagtt caaggtggaa    120
gagtgattga gtcccggtat ctgcagtatg aaaagaagac aacccaaaag gctcctgcag    180
gagatgggtc acagacccga gggaagatgt ctgaaggtgg aaggaaatcc agcctgctcc    240
agaaaagcaa agcagatagc agtggggtcr gaaagggtga cctgcagtcc acgttgctgg    300
aagggcatgg cacagctcca cctgacctgg atctctctgc tattaatgac aaaagcatcg    360
tcaaaaagac gccacagtta gcaaaaacaa tatcaaagaa acctgagtca acatcatttt    420
ctgcccctcg gaaaaagagc ccggatttat ctgaagcaat ggaaatgatg gagtctcaga    480
cactactgct gacgctacta tccgtaaaga tggagaacaa tcttgctgag tttgaaagaa    540
gggcagaaaa gaatttatta ataatgtgta aggagaagga gaagctacag aaaaaggccc    600
acgagctgaa gcgcaggctt ctcctctctc agaggaagcg ggagctggca gatgtcctgg    660
atgcccagat cgagatgctc agcccccttcg aggcagtagc gctgcccgtg aggtccatcc    720
acctggaggg agatgggcag cagctcttag acgccctgca gcatgaactg gtgaccactc    780
agcgcctcct gggagaactt gatgttggtg attcggaaga aaatgtgcag gtgctggact    840
tactgagcga actcaaggac gtgacrgcga aaaaggacct tgagctccga aggagctttg    900
cccaggtgct ggaactctcc gcagaggcaa gcaaagaggc agccttggca aaccaggaag    960
tctgggaaga gacccagggc atggcgcccc ccagccggtg gtatttcaat caagacagtg   1080
```

272

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cctgcagaga atctggggga gcacccaaga acacgcccct gtctgaggac gacaacccgg   1140
gtgcctcgtc agccccccgct caggccacgt tcatcagccc aagcgaagat ttttcttcaa   1200
gcagccaggc agaagtcccg ccctctctct ctcgttcagg gagggacttg tcatgactca   1260
tggttacatt caggatactt gagcacttta tatactaccg tagcactgta gctatttttt   1320
atgtgataat cttgtttgat aaaaaagtaa acctgttttg caattgaaaa aaaaaaaaaa   1380
aaaaaaaaaa aaaaaaaaaa aaaaagggcg gcc                                 1413
```

<210> 454
<211> 2163
<212> DNA
<213> Homo sapiens

<400> 454
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gctggcacca caagggaaca tctggggctg gccctggccc tgaaagtgcc cttcttcatc    120
gtggtcagca agatcgacct atgtgccaag accacagtgg agaggacagt acgccagctg    180
gagcgggtcc tcaagcagcc tggctgccac aaggtcccca tgctggtcac ctctgaggat    240
gatgccgtca ctgctgccag cagtttgctc agtcacccaa tgtcacccc atcttcacat    300
tgtccagtgt gtctggagag agtctggacc tcctcaaagt ctttctgaat attctgccgc    360
cactcaccaa cagcaaagag caggaggaac tcatgcagca gctgacggag ttccaggtgg    420
atgaaatcta cacagtacca gaggtgggga ctgttgttgg aggaacactt tccagtggga    480
tttgccgtga gggggaccag ctggtggtgg gccccacgga tgatggctgc ttcctggagc    540
tgagagtatg cagcatccag cgcaaccgct ctgcctgtcg tgtgctgcga gctggtcagg    600
ctgctacact ggcgcttggg gactttgacc gtgcactgct tcgcaagggc atggtgatgg    660
tgagcccgga gatgaatcct accatctgct cggtgtttga ggcagagata gtcttactgt    720
tccatgccac camcttccga cgaggattcc aggtgacagt acacgtgggc aacgtacgtc    780
agacggcatg gtggaaaaga tccatgccaa ggacaaactg cggacaggcg agaaggcagt    840
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ccgggagggt gtcaccaagg gcatcggcca tgtcactgat gtacaagcca ttacagcagg    960
agaagcccag gccaacatgg gcttctgaac ccttcaggca gggacagttc tattgctgtc   1020
cctacaatat ataaggtgac ttctggccat gctgccctgc cattggcggc tctgtgtgtt   1080
aataggctag ggagagaggg gtgctgtctg ccacttgctc cctgccaact ttctggagag   1140
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agtgctccga agctgtgtgc tcacctggtt ggctcatcaa acctggcaac cctgtggcct   1260
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aagcactcct ttttctatac ctcttctcaa ggccatgtaa gttgcccatc tctacctggc   1440
tgtggacaaa aggttatctg ctcttggcca tctggtggtg gtggcggccc agagtctgaa   1500
gaaatggcac agggacagtg aatggtagtg ttgccaccct gtgctgaggc ctgaggcctc   1560
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ccatcccctc ccggcttata ggccccacag gtgctatttg ttgtgctggc ccaggcgtgg   1680
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ggtggcatct gagttcccca tcctaccact ctcaccccac tttcctgccc cacctaaacc   1860
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gtgtcctggg ttcccatgga ctcagggatt tgttggctaa ggtttctctg tgcatatata   2040
tatatataca tatgtatata tatttaaata cacatatata ttgtacagaa taaaaatgtt   2100
ttattgaaaa aaaaaaaaaa agskcggscg ctctagagga tccaagctta cgtacgcgtg   2160
caa                                                                  2163
```

<210> 455
<211> 2163
<212> DNA
<213> Homo sapiens

<400> 455
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gagcatccag cgcaaccgct ctgcctgtcg tgtgctgctt cctggagctg agagtatgca     60
gctggcacca caagggaaca tctggggctg gccctggccc tgaaagtgcc cttcttcatc    120
gtggtcagca agatcgacct atgtgccaag accacagtgg agaggacagt acgccagctg    180
gagcgggtcc tcaagcagcc tggctgccac aaggtcccca tgctggtcac ctctgaggat    240
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273

```
gatgccgtca ctgctgccag cagtttgctc agtcacccaa tgtcacccccc atcttcacat    300
tgtccagtgt gtctggagag agtctggacc tcctcaaagt ctttctgaat attctgccgc    360
cactcaccaa cagcaaagag caggaggaac tcatgcagca gctgacggag ttccaggtgg    420
atgaaatcta cacagtacca gaggtgggga ctgttgttgg aggaacactt tccagtggga    480
tttgccgtga gggggaccag ctggtggtgg gccccacgga tgatggctgc ttcctggagc    540
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tgagcccgga gatgaatcct accatctgct cggtgtttga ggcagagata gtcttactgt    720
tccatgccac camcttccga cgaggattcc aggtgacagt acacgtgggc aacgtacgtc    780
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ccgggagggt gtcaccaagg gcatcggcca tgtcactgat gtacaagcca ttacagcagg    960
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aagcactcct ttttctatac ctcttctcaa ggccatgtaa gttgcccatc tctacctggc   1440
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gaaatggcac agggacagtg aatggtagtg ttgccaccct gtgctgaggc ctgaggcctc   1560
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ggtggcatct gagttcccca tcctaccact ctcaccccac tttcctgccc cacctaaacc   1860
ctcgttttag taatttgtag tgactgttcc cttccctctg ttgcagggaa ccaggaggaa   1920
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gtgtcctggg ttcccatgga ctcagggatt tgttggctaa ggtttctctg tgcatatata   2040
tatatataca tatgtatata tatttaaata cacatatata ttgtacagaa taaaaatgtt   2100
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caa                                                                  2163
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<210> 456
<211> 1588
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1586)
<223> n equals a,t,g, or c

<400> 456
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aggcaggaag aggagcagga cttggatggt gagaaggggc catcatcgga agggcctgag    120
gaggaggacg gagaaggctt ctccttcaaa tacagccccg ggaagctgag gggaaaccag    180
tacaagaaga tgatgaccaa agaggaggag gaggaggagc agagaactga agaataacga    240
aktatcctta gcgtcctcct aaaggctttt ccttttggca tcttaaaagc ttgagagata    300
aaacggaaac cccagagagg agtctgggca ggctcccagg gtgcatgctg cctccataaa    360
tctgctgagc tctagaccct caatcaggac ttgtcccttg gctagcagga tcctgggaac    420
acctttggcc ctgccctgtg tagagatgtt catgtctgtt cctgtgggtc actttgttaa    480
gctgaagagt tttaagaggt agagctcaga ccctggactg ggattttttct taccactcaa    540
acttgctatc cacacaccct gcacacctta gataaaaaga acattttaaa agcagagttc    600
actttcactc cagtctcccc tcttttgccc tcactgaagc caaaccacag aagactttga    660
ggaatgagag acaaatgagg tagagctcac ctgtgctcac cagctccgtc agggtggtca    720
gccgacccct ttccctggga accccacttc tctctgtggc tggcttggtt gtcgggggtg    780
agatgccata ttgattacag ggcagcaaag aaccagtacc aggaatttac ttgaccattc    840
cccttatttt tcatctagag gaatctcgga ttcagccctt tcattgctaa gacacctttt    900
cactgaggtt cttaccagct cagccaaatc tccactctgc tatagcagaa gcaataatgt    960
```

```
ttgctttaaa aagatttctt gacctatgcc ttttcttaga aagtttgata gattagttag    1020
aacttcagat catcagatca gtctcaaatg ggtttcttgg aattttatat ttgacaatat    1080
ttatactata ccaaactcat ttgcagttct taggtttgtt ggttaaaaca ttttttaaa     1140
gcagtaagtt tatagaaaat gttttcattt aatggaaggc tggggaatgt ccagcatcaa    1200
cccctatggc atgcattccc agtggccttc tcatctgggc ctggaacctt tggttcaggg    1260
cttaggggag aacaggccac atggcaacag ccacacagtc attgccttca acacagagcc    1320
acgtgtcccc aaacagcaat agtcatgccc ttgtccaggc tgggatctaa ttgatacaat    1380
aggtcgttga ctccctccta gtagagctat ctaggtttgt ctggaaagtt ccgaccctg     1440
gcttataggc accacacctc atgtactcct catggcttgg atctctgtat tcagcctttg    1500
ttcagtccaa taaactttga gtagatgatc tcaaaaaaaa aaaaaaaaa aytsgggggg     1560
ggcccgtacc cattggcctt tagggngc                                      1588
```

<210> 457
<211> 682
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (670)
<223> n equals a,t,g, or c

<400> 457
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aacacactca catgcagtga gttacatgaa gcagatttat gactatgctc acaggcatca    180
agggacaata gaagcctagg attcagtgtg atttgtcccc ttcatgtccc ccagactcca    240
gaaaggtgct caggttaaat ggtgtctcat ctgtgtatgc cgcacttgca ctacacctga    300
gggtccctgg aagacatctc tctctgggtt ttatattcca tggtgatatg acttgctggc    360
taaagcatta cagtgtactg tttctggtcg ggactggaac agaacttgag ctgttttggt    420
cagtcccttc ctatcttaag atgttgtgtt gtacaattat tcttaagaac tacaagtgaa    480
aaaaggagga gaactgggtg gtccaaggcc accagagcac tgtcctgcag atcccaagga    540
gccaatttaa actaagaaag gtattggctg agatagtgaa agaagtcttt cctccttctg    600
atcagaggag taaaaaaaaa aaaaaaaaac tcgagggggg gcccggwccc aattcgccta    660
taggaggcgn attacaatta ct                                            682
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<210> 458
<211> 907
<212> DNA
<213> Homo sapiens

<400> 458
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ataatttttt ttcaccaggc actgtgtaga tgcctccaaa tgccctcctg ttgtccagtg   120
tgctaaattt ttttttgctg acaagttttg tttgcaatgt taaaagggtt gagaagcatc   180
attctagtca aatgtactca ttttgtatga agaaaactga aatctacata gcaggctcag   240
ggatttgtcc agtgtcctac agttggttgg tgtgaggctg gatttgaaaa ttggggatct   300
tggatcttga ctcttcagct ctcatcacct cacactgacc ccctctcccc ccgaaacatg   360
agggaatatt ggaggaaggc attgatgata attgaaagac aaaaatacag aacctcagag   420
gaattattaa aagaactgca catatgtagt tcagaaatct ttgagaccct actgtatcta   480
atagtgctta gaatcttctt atataataat attattaata ttctataatc tagaatagat   540
tatagtagga ttcgttttat gatgacttgg gctgtatctt taagaaaaca aaagattata   600
gcaaaaggag tttagggcaa acataaataa aaattgatac taaaatcgta tgtatgctat   660
ttccaaaaaa gggaggaggg aatatatgag acctttcaag ttcctctggt actataatta   720
cattttctct catcttgctt ttgattggat tagaattcac gcaattaaag ataatctagg   780
gccaggcacc tataatccca gcactttggg aagcagaggc aggaagattg cctgagccca   840
ggattttgag accagtctgg gcaacatggc aagaccccgt ctctttaaga aaaaaaaaaa   900
aaaaaaa   907

<210> 459
<211> 1508
<212> DNA
<213> Homo sapiens

<400> 459
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tttattattg agtaaggaca cttccttttt aaaaattact tggtatccta catagattac   180
tatattaaag cattatttgg ctgttctcaa tcagtgtttt ctttgttcag tgtgccaaga   240
tcatactctt tagaacattg cattatgaaa atgaagtttt gacagtcagt tgtggagttt   300
ttgtttttgtg tgtgtgtgtg tttatttgtt ttttaccttc ccagttcttc agccctcttc   360
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atcagaattt attccagtat tcacagcttt tgaagcaagc tttaagattg cataaatcct   480
tagtaatcat ggtttaagag aaacaatccc agctcctata atttttcttc actccaatca   540
gaaaggcaac tggccatgaa atctcagctg gaatatttaa aaggaaattc agatatggct   600
tgctcgtttg ttaacttatt accaaatgta ttaaccaaag gaaagaattt aggccaaatc   660
tgacagggtc atatgacata tgcagggaaa agccaacagg ttcctattag gctactcgaa   720
ctcatcctac tactactact ctttgcgggg gttaggggta ggtttttttaa aatgttcttg   780
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ggaactatac attaccccct tttgatagg taatggaaat tgacagggtg ggttattgat   900
ggaaatgatg tcataactag tctgaagact atgttatgtt aactaagtat gttattactt   960
agtctgttta aattcccctt gatgaatgag ggaagattgt taaatacctt gtatggtgat   1020
agtctgccct ttatttttt aagtttaacc agtaaagact ataataaaag gtaagatttt   1080
taaaaattgc tgatagaaaa gaatcacaag caatagaaac ggaaacaaca gatttttatt   1140
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aaattaacag tttttaaggta gtacgtttga catgtgtgta tttttataac agcctattaa   1260
aatgatgtgg aagattatac ttttaaatat gcccactttg ttttttttaaa ctcattgtag   1320
tcttagtctt tcctccaata aaattgttgt gtctttatat ggcaaatgta tagttattat   1380
aagcattctc acgcatgtga tcccagcact ttgggaggcc aaggcaggtg gatcacgagg   1440
tcaggagatc aagaccatcc tgactaacat ggtgaaaccc tgtctctact aaaaaaaaaa   1500
aaaaaaaa   1508

<210> 460
<211> 1003
<212> DNA
<213> Homo sapiens

276

<400> 460

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tccttagttt taacccagtt atggctggct gtaagttcca tcccgtcatg accattatgt    180
ttcctcaact tttctatttt cctacttcct ttgctgtgct ctcagtcgct gggagacgaa    240
agtgctgctg gttagcacag aagaaactgc tgctgctgcg gcttctactg ttgtctgcca    300
tctctgttac catcgagacc ggggctgtgt atgctcgagg tgcagggagc taatgtataa    360
ggagttaaat gaactcttgc tgctgccaaa tatgttgtta tcactaactg caccgctgct    420
gtcattagtg ctgctgccaa cactgcaagc cctgctgctg ccagtgccaa ttctgctgat    480
gccttgggct ctccatgtcc cagggtgatt ccatagacaa gcagctgctt ttagatttca    540
cttgctcatt acctgtagat cctttgcctt aggactcaag cttaagccca tgaagcctgg    600
gatagaagac aattggaggt atgttttatc ttctctagca tctgggacaa ctggccttga    660
accaaacatg tgcacctcgt ttttctttc ccttcttcct ctgagatttc ttttcccaga    720
ggctcttatt tcatgcaatg atccactagc cctggaaaca ggaacataaa cactcgaacc    780
ctagaatgaa cataatttag tcttaactac attagatatt ttagtttgaa agaaatcact    840
cacatttcat aatcctgaaa catataaatt tatacttagt tatctgtgca aaaattgaat    900
catgataatt attaaagaat tactatgcaa gtgtaaatag ctttggtatt aaccaagagt    960
ggtttcagtg tgcttttgta aaaaaaaaa aaaaaaactc gag                       1003
```

<210> 461
<211> 678
<212> DNA
<213> Homo sapiens

<400> 461

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agtccagggg actacattgc atttagctgt catgtctctc cagtttcctg tctgtgata      60
gtttcttagt ttttccttct ttttcatgac cttgacagtg ttgggtagta ctatacaggt    120
attctgcaga atgtcgccca atctgggttt gtctgatgat tttctcatga ttagatcagg    180
gttatggatt tttagaaaga gtatcacaaa gaggaagtgt ccttctcata acatcctatc    240
atggggtgta taatagccac atgatgtcat ggttgatatt aaccttcatc acttggttag    300
tgtttgctag gcttctccac tgtgaagtta ctgttttcc ctttggaagt aagtcagtaa     360
atctaactac cctcagatga gagagagcag gaattaactt cctcctccag gggatactaa    420
aatatacata acataaaatt tacattttaa ccatttttaa gtgtacagtt catattgttt    480
tataaccatc accaccaccc atctctagaa ctgtttcatt gtctccactg aaaccctgca    540
ctcataaaac actaagtgta aagggaattc ttacattaaa ttgtttggca tagcatctgg    600
caatgcagaa ggcacacaat aagtgtgaac tattcataag tcgttttcag tgagactctg    660
tctaaaacaa caaaaaaa                                                   678
```

<210> 462
<211> 3281
<212> DNA
<213> Homo sapiens

<400> 462

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aagcagactt ttgtgggctc ctctttgggg tgaccactgc tttcaaagcc atctgccaag     60
gctctccagg gcaggacctg actggtgggg aatgagtgtt cagaagcctt gggagaggcc    120
aaagagccat tctagcatga tctgagaaaa ccttcctgca gaggccagaa accttgagct    180
taggtgcctg gggaccagct tcgacattct ctccagtttc tgattctaat ttttgccacg    240
tgtcacaact tttccagtct ctgagaaggt cccagccttt ctcaaatatt ctgattttga    300
aaatatgtat ccaaagtggg aggcccctgt gacattttgc caacttaaac gagaaaaaga    360
cccccgcac ccggcacact cccccttcct ccagccccgc ttcagccaca tgctccagct     420
gctgcccagt aaagccctgt gccttttttt ccctgaata ctgcccaaag catcccttc     480
ccatctgcct ctcaggagtt ggggactttg ctaggagatt ttttaagtgt tccttactgg    540
gacaacgtgg agccacgttt gcaggagctc catttgtatc cctgctggtg ttgacttctg    600
tgtaggggcc agttcatgtc cctgactctc acctcccatt agataaatga agcccacccc    660
cctttctaga gtgatgagag tcaagaagag gggatgtatg aacggccaaa ttcccatgtg    720
agaggaagat gacctgatcc acctagcctt ttcttctgga tctgtcctcc ctcacccctt    780
tcacctgagc tgtccacagt aggaaacata aagaaacaat gtcccctaca tatccccatg    840
actacataat ccatcatcgt aggaaatagg aaagcaaatt tgattttggt tttgtaaaac    900
gtacatgctt caataattct tttttgtgtc ttaaatactc ataggggaaa aaaacagctc    960
acccaaggtg ttaggtttca catatatatt catcaactat tttagaagat ttaattctat   1020
```

277

```
caaatcttgt attacctcag atcattttaa atagcaagcc aataacgagc tttgaaggct    1080
attttaccat tcctgttcac aaaaggttct catggtgcct gacaggttac ccttgagggc    1140
ttgtgtctac tttttaaaag tcaatggttt ttttcttgt gttctagttt ccataatagg    1200
agagaaaata tagaaatata tgcaaaaatt atagtttct ttagatcaga aactgatatt    1260
tttgggtcag ccatatgtat tttgtttaaa ggatttaaaa taaagtgccg tcatgtagcc    1320
ctgtggaagg gagcacataa ccagctgttt ggcatgacag gtgacttagt atatttgtaa    1380
ttggtttta aaccaataca ccatactttc tttctgcaaa cagccatctt tatacttagg    1440
gaagaaaaat tgttgggttc tagacttttt taatataaat tttgttgata tggaattagg    1500
taagtttaag tgtctatgtg catatgtttt ttatataagt tttttctatt cagtttcact    1560
gatccaactg gcagtgggta aatatggcat aagttaataa cacttttccc caaaatggtg    1620
ctttggattt gaaaagggtc tgatggggag aaggagaacg tatcatccta gcttcctctc    1680
ttaataaacc tagaaaaacg ggtagtaaac tgtggatagt caggaaaaca cccagcaagg    1740
gacacagctg tcaggaaatg aatcttcccc ccaacccca ccatgcagat ggatagacag    1800
aatcttcct gactagtcat taggatcagg ggcctctgtt ggatttgtgt ttcttgaaga    1860
atagctggca gagtggtata aaagacacga atatctcctg gtctataagg atactctgat    1920
ttggggtttg cattttttcat ggtttttatt tcctgttccc cctggagttt tccattagtg    1980
agttttgtg caaggatctt atttgtgatg ccttccctcc cctagaaaga ttttgtgcaa    2040
tatattaaat ggggacagaa ttctaaatgg ataaacaat ggctggttct agccctgagt    2100
gacagtctta aggctagatc cttcccatag tatcatctgt cctctggaat gactctcctg    2160
tccctaaagg ggttaagaga gagatcacct agaaatccct ctggacactt gtgggttctt    2220
tagggtttga gtttcttctt ccccttgagc ttcagagagg agagttggca tggttaaatc    2280
tgaatggtta cctcactgct gaaaacccag aggggcgtgg cacactcgct tgtgtggaaa    2340
agcctctaaa tgcatccctt cctttctttc ctgcttcctt tgccttacaa ttgaagcagc    2400
ccgtggtacc atcacagtat gcagagactt cctcaccttt catatctagg gaccacccc    2460
gatgcattgg tgagggtggg cacttataaa tgcctgctat tgttaagcca ttccagcctc    2520
ttcctctgaa tagaccagac gcccttttcac ttagttcagt gccagtcctt ttgccttccc    2580
aaccctgctg ttaggcctgc tgttcccttt gctcttgatt aggagagatg gaaggagatg    2640
agctcccata actgaattgg cctttggttc atgttttctc cccatatgta tatatgccat    2700
atgtgaatat gccatatata tgtgccaaca aatctatcta cgttgttctt ttcaaattag    2760
cacgcagata ggaattttga gtttcttctt cttttagtaa ctagtataac aagcactggt    2820
attttgtac aaaaaagaaa aacaaagat tgactattgt ggtctgcatg acataaacaa    2880
acaaatggtg atatcaaagc aacgtatacc ccagtccagt gtgtgttgcc ataatttgca    2940
attcagctta acagtgcacc caatctatat ttgcatttg atattattta agctctatgt    3000
acaaggtttt gcatgtattt atatggttct tagggaaaaa aaatgctata aactgcaaat    3060
ctgaaattca aatgtgttgt tccactgaga ccagaagaag aagaggagtt ttaaaaggga    3120
taatttgttg gagccaataa agctttttgc tgatgaacag aaaccaatac tgctgtgcac    3180
tgagaataaa aactcatgcc cacttgtaaa aaaaaaaaa aaaaaaaaa aaaaaaaaa    3240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaactcg a                         3281
```

<210> 463
<211> 870
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (836)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (837)
<223> n equals a,t,g, or c

<400> 463
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ctatgaccat gattacgcca agcttcgaaa ttaaccctca ttaaagggaa caaaagctgg     60
agttccaccg cgttggcggc ccgctctaga actagtggat cccccgggct gcaggaattc    120
ggcagagcca acctcaggag ttgaagaggc ttatgcggtg ggggcaggag gagaactgct    180
ttccctcagc tgagggaaga ggggctattc cagagggact gagtcagtag ccaaagactc    240
agcttcccct gtccttcccc agtcccttca cttcccctac cctctgacct atctctgaaa    300
gccaagttat gcgtatgtgt gtgtgcacaa gcttgtcttt gtgtggtatg tgtgtgtgag    360
```

```
tgtgcatgta tgcacacaca caggggttaa ccacccctca cctagggctc cagactccag    420
ttgtccctct cctcctacct gtgtctcctt gttttggggt cctgactgaa gaaggtgtcc    480
aggggcaga  gtcagggcca agcactgggg tgcctcctct cacctggcca gactctgacc    540
cacctacctc agctggggtg aggggcaccc ctcaaactca gtcatgtggt tccaaactac    600
cccattcccc actccagact ctgacccagc ctcagtccta actcctgggg ctgggctgag    660
gggaacaagc atttgctgaa acttgaaaaa acaaagcaaa tcaaaaacag gaaaaaattg    720
tacctggtac ttttttttag aaaaaaagat taaaaaagaa agaataaatt cttgtttgga    780
aacttgaaaa aaaaaaaaaa aaaaaaaaaa cycgagggggg ggccggkacc caattnnccc    840
aaargggrgg gtttaaaatt masgggcggg                                      870
```

<210> 464
<211> 1735
<212> DNA
<213> Homo sapiens

<400> 464
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cccacgcgtc cgccaggcct tgagacccag aagggagcga aggtttttgc tgcgccaacg     60
cagtgaccga aggctccgct cacgcccggc ctgatcctgc ctgaagatgg tgccactggt    120
ggctgtggta tcagggcccc gtgcccagct ctttgcctgc ctgctcaggc tgggcactca    180
gcaggtcggc ccccttcagc tgcacaccgg ggccagccat gcggccagga accattatga    240
ggtgctggtg ctgggtgggg gcagtggcgg aatcaccatg gctgcccgca tgaagaggaa    300
agtgggtgca gagaatgtgg ccattgttga gcccagtgag agacatttct accagccaat    360
ctggacactg gtgggtgctg gtgccaaaca attgtcctca tctggtcgtc ccacggcaag    420
tgtgattcca tctggtgtag aatggatcaa agctagagtg actgagttga acccagacaa    480
gaactgcatt cacacagatg acgacgagaa gatctcctac cgatatctta ttattgctct    540
cggaatccag ctggactatg agaagattaa aggcctacct gaaggtttcg ctcatcccaa    600
aatagggtcg aattattcag ttaagactgt agagaagaca tggaaagctc tgcaggactt    660
caaagagggc aatgccatct tcaccttccc aaatactcca gtgaagtgtg ctggagcccc    720
tcagaagatc atgtacttat cagaagccta cttcaggaag acagggaagc gatccaaggc    780
caatatcatt ttcaacactt ctcttggagc cattttcggg gttaagaagt atgcagatgc    840
cctgcaggag atcatccagg agcggaacct cactgttaac tacaagaaaa acctcattga    900
agtccgagcc gataaacaag aggctgtatt tgagaacctg gacaaaccag gagagaccca    960
agtgatttca tatgaaatgc ttcatgtcac acctccaatg agcccaccag atgtcctcaa   1020
gaccagtcct gtggctgatg ctgctggttg ggtggatgtg gataaagaaa ctctgcaaca   1080
caggaggtac ccaaatgtgt ttgggattgg ggactgcacc aaccttccta cgtcaaagac   1140
cgctgctgca gtagctgccc agtcaggaat acttgatagg acaatttctg taattatgaa   1200
gaatcaaaca ccaacaaaga agtatgatgg ctacacatca tgtccactgg tgaccggcta   1260
caaccgtgtg attcttgctg agtttgacta caaagcagag ccgctagaaa ccttcccctt   1320
tgatcaaagc aaagagcgcc tttccatgta tctcatgaaa gctgacctga tgcctttcct   1380
gtattggaat atgatgctaa ggggttactg gggaggacca gcgtttctgc gcaagttgtt   1440
tcatctaggt atgagttaag gatggctcag cacttgctca tcttggatgg cttctgggcc   1500
aaaactgcag tcactgaatg accaagagca gcacgaagga cttggaacct atccttgtaa   1560
agagttcctt gatgggtaat ggtgaccaaa tgcctccctt ttcagtacct ttgaacagca   1620
accatgtggg ctactcatga tgggcttgat tctttgggaa taataaaatg aaataatact   1680
tttattttct gaataaaagt ttgtcactga aaaaaaaaaa aaaaaaaaac tcgag         1735
```

<210> 465
<211> 509
<212> DNA
<213> Homo sapiens

<400> 465
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ggcagagcag acatgcaagt gcatgacctc agcttttta attcacttga ctcttgtttt     60
agtacctact gtgaacaaga cacaaactct gggctcaaaa atctcatgct ctaggtaagg    120
aacacagaca tataaagata ttatgagact agagcagctt ccctgagga ggccagaaaa    180
tccttcacaa aacatgaaaa attctgtctt gagggatata tgggaatttg ctgggtagag    240
aaagagagga aatgcattct ggtggcatat agtctcaaag catggaagag tatgctgttt    300
acatactttc gagtttacaa agtgctttcc tatatgtcat atgctttaat cattcactag    360
ctttgtatga tatcagatca aaaggagtta agtgattatg cagtcaccgg aataataggt    420
atcagactag agtttgaatt aatccatttc ttccttgatt tagtacttat ctaaatccaa    480
aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                                       509
```

279

<210> 466
<211> 917
<212> DNA
<213> Homo sapiens

<400> 466
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gccgtaagat agctaggtca ctaatagtct gtggcatgga aaaaaatttg ttttgtttta      60
atatggtgct aactaagcat atagagattg actctgtaac tttaactcca gtaacacact     120
gttatcacca cgcaaattga ccagcctagt tagtaacatc atatgcaata tcatacaaac     180
tacgtagaac catgcctggg gcactcatct gttagctctt acatgccctt tgtgctcaaa     240
gagaacaatt tgtggttgtt gtatgccagt caattcagtc atcatggagc ttagttgttt     300
actgtattgc atgctaagca gtagactcta ggaatctaat aaatttgatt ctcacattgg     360
tcctgtttgc cacaaacatt gccatgcctc aagaacctca caagtttgtt tttcttagaa     420
cagtgcatat gtagttctca tactctgcaa gtgtttgcct cagcataatt gtgtttatgt     480
ggaattgcac tggcattgca atgtgagaat gacagagttg acaggaccac taacatgtac     540
cctgggaatt gtttccccca tccccatagc tggctgaaga aactttattt ctgagttatt     600
atgtagggac tgaaaggttt ttttttgttt ttgtttttgt tttttttac atatatacac     660
agattgtttt ttacctacaa tgagcaaaaa taatctggac aaaaaaataa tgctctccct     720
gtttttttctt tcaaatgtat acatatattt gaaatcttag gcatagggaa aaacttttat     780
gtcatcttca gagctacagc catatttttt agctagaacc aactcttaaa tctctcccga     840
cagaacctta aggaagggga caaagtgatc tccagtggaa atgtgaaagg cataaaaaga     900
aaaaaaaaaa actcgag                                                     917
```

<210> 467
<211> 676
<212> DNA
<213> Homo sapiens

<400> 467
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ggcacgaggc gctcagcccc agcctcctca cgtgtacatg gctccatgga ggttctccag      60
tcggttctgc tgctgctgct gttttcgagc cttatctcgt ctgtgttcct cataagtgta     120
gtcatcagtg ggcagctcat ggcggcacaa gggacaggaa tttgtcttgc ttagccaggg     180
cagaatgcaa ctggaatgaa aaagatgttg ggaagcatct caatggcagt ctcctcctca     240
gattccaaaa gatacacggg gcacttgagc tcagccttga gagcctctga tgactgtcct     300
ggagaggttc tcaaccacaa tcttggcagc cggtggaggc aggtggtggt cccaatctac     360
taccaacccc aagtcttcaa agtccatcct attcaaaagt gaccttacga gctccagcac     420
catgttggtt cgagtctcct gcttgagggt ccaacggctc acagtcgtgt tcatcgatat     480
aggacgccat ggctgcccag ccgtctgaca tgtgatattt tgatacaggt atacaatgtg     540
taactatcaa atccgagtaa ctggggtatt gatcaccttg agaatttatc atttctttgt     600
gttaggaaca gtccaattcc actctttttat tttaaaatat gcaataaatt attaactgta     660
aaaaaaaaaa aaaaaa                                                      676
```

<210> 468
<211> 1232
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1204)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1229)
<223> n equals a,t,g, or c

<400> 468
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gtgtgtttaa tatgatttag tgacaaccag gaaaacttac ttgggattat tagcactttc      60
aaacttaggg acattattaa attggatgga atgcacttct aaatgtttaa attaaaattt     120
```

```
caaagctctt tcgagattca ggttctcaat aataatattc aagttttaga gtttcacttt    180
gtactattta aatttatgga actagtttcc atactgactt gtaaggtttt ggggtcatat    240
ataaggacta aagccaagct aggcaaaaca atgacagcac cgttttttca gtgaagctct    300
cagaatgtcc agtacagatg ttgcagataa ttccaagaac tccttcagca ggtgttcttc    360
accattcgta aacagtattt taagatgttc actttgctct tcttttttggt tacatacatt    420
ttaataactg gtatgttgaa gtagtgtcta aaagtatcta gtctttattc acagtacatt    480
atattgtgtg atgcactgga ctaactctkg tttaccattc atgtaacaaa acccagcaca    540
ttatctgcac tataagctca aagaatgtca catccgccca gacagctctt tgatgagggt    600
gatgggaact gaataaacca tacggactgg cagtaacaag ggctttttact gttctgttca    660
gtggaacctt cttggtcaaa ttgtaattag ctagcattat atttatatac agggtctttt    720
ttctttaccg atgtattttc ctactcatag ccaaccaata aattcagtat ctgtttcaaa    780
tattttagaa gtgtagtttg tatagctgta gtactgaggt ttgaggaaaa ataaatgttg    840
atcagcagac cacgtatta aaattctgaa tcttctggga cagggttgta actcagcctt    900
ccaaagggaa gagtgcaggg ggacggggcc atgatatggg gaaatggtgt aaactaatgt    960
atttctttat tggctgttat tctgtataac actcatatct ttgccaaagt tcaattttat   1020
atttaggcaa ctgatggtcc ttttgcattt aggattttcg ttgttgttac cttatacctc   1080
atgatataag gaatgggctc atgtgtcttc cgtcttttgg aaggaggttg acatatttta   1140
aataaatgct tttaaataca gtagcaaaaa aaaaaaaaaa aaaaactcgg ggggggcccc   1200
ggtncccaat tggcccttta gggggcggnt tc                                 1232

<210> 469
<211> 862
<212> DNA
<213> Homo sapiens

<400> 469
ggcacgagtt ttatttcagt gtttgctctt cactagtata tataaaagtt acttgagaaa     60
ttgaaaatat ttctgtaagc agaaatagta tttttttcaa aaagtgtttc agatgcttca    120
gttattcctt gcatcatttta ttgttctttt acagatttta atcccctttg ttcttgttat    180
gtgtgctttt gaagcagttc agttgactac tcagttatcg tcaaaaaggt aagatgaatt    240
agtttaagaa acatttgatt tgcctatttt taggagatga gagtaaactt tcgaagacat    300
ttcatatgat tgctattaag acactgtaac atagattgtt tattacaaaa atgagaaaat    360
tttcacccgt ttagtcagtg ttgcttgtca ttagaggaaa ttagttgatt agggcctcta    420
gcagacaaac ttgctttctc agcaataaaa tgttattaga gtattattca agctagtgaa    480
gaacctccct agaaaacagt aaaacataaa tgttaaatta ttgtagttaa ttacttgtta    540
taactgtgcc tacaaaaagc aaaagatact ctaacttta tttttggttta tttcttaaat    600
atgttatata aatatgttaa cattatttca ttttccatga cttaaaatta acttttctac    660
atgtcaaaaa tatactcagt ttctctgtca tgatttctgt acatttgaca aatggagtag    720
gaagtattct ttctgagttt tgaggaattt ctggagcagt ccgtcttaag caatcaagac    780
tgtggaagaa aagctgtcaa ctcaactatt tgctttttt aaccaataaa attgcctcat    840
cagcaaaaaa aaaaaaaaaa aa                                             862

<210> 470
<211> 1388
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1376)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1377)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1379)
<223> n equals a,t,g, or c
```

<220>
<221> SITE
<222> (1381)
<223> n equals a,t,g, or c

<400> 470
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ggcgggagct ggggaacagg catggacgtt tccgggcaag agaccgactg gcggacaccg    60
ccttccggca gaagctggtc agtcaaatcg aggatgccat gaggaaagct ggtgtggcac   120
aagtaaatcc agcaaggata tggagagcca tgttttcctg aaggccaaga cccgggacga   180
ataccttct ctcgtggcca ggctcattat ccattttcga gacattcata acaagaaatc   240
tcaagcttcc gtcagtgatc ctatgaatgc actccagagc ctgactggcg gacctgctgc   300
gggagccgct ggaattggca tgcctcctcg gggcccggga cagtctctgg gcgggatggg   360
tagccttggt gccatgggac agccaatgtc tctctcaggg cagccgcctc ctgggacctc   420
ggggatggcc cctcacagca tggctgtcgt gtctacggca actccacaga cccagctgca   480
gctccagcag gtggcgctgc agcagcagca gcaacagcag cagttccagc agcagcagca   540
ggcggcgcta cagcagcagc agcagcagca gcaacagcag cagttccagg ctcagcagag   600
tgccatgcag cagcagttcc aagcagtagt gcagcagcag cagcagctcc agcagcagca   660
gcagcagcag cagcatctaa ttaaattgca tcatcaaaat cagcaacaga tacagcagca   720
gcaacagcag ctgcagcgaa tagcacagct gcagctycaa caacagcaac agcagcagca   780
gcagcagcag cagcagcagc agcaggcttt gcaggcccag ccaccaattc agcagccacc   840
gatgcagcag ccacagcctc cgccctccca ggctctgccc cagcagctgc agcagatgca   900
tcacacacag caccaccagc cgccaccaca gccccagcag cctccagttg ctcagaacca   960
accatcacaa ctcccgccac agtcgcagac ccagcctttg gtgtcacagg cgcaagctct  1020
ccctggacaa atgttgtata cccaaccacc aatttagatc atctttagcg gtgaatgagt  1080
ggattaattt tactacaact actgatggtg gtggtggaat ttcagttgct tttttttgcg  1140
aggttaatag gtctaaaatt ttacttttgt ttgatgacta gtggtttgaa tttttcgctg  1200
cctgttatat tgcttgtata ctttgcctgt ttgtgtcact gtccttttgg attggagtca  1260
tactgttttt ttttgtttat tttaacttat ctgtataaaa cattgtattc aaaactagtt  1320
attgktggtc agatttaata caaatgtttt tcctaaaaaa aaaaaaaaaa aaaaannana  1380
nactcgag                                                           1388
```

<210> 471
<211> 692
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (681)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (692)
<223> n equals a,t,g, or c

<400> 471
```
gctcgtgccg gtnctggggt atgtctttat tggcagcatg agaacagact aatacaactg    60
cctagaatag tcactgataa acagtaaact gactcaatga aagtcagcca ttattagtac   120
aattataaac ctgtggcaga atgacttata aatttatact aattttaaaa attaagtaat   180
actagaaaaa ttagcaaata atagtctgat taagaactga cattcctcgc ctctttttcct  240
ttctctgcca tcatggtgtg tgcttgactt tgcttcttgc catgtcttct cacaagactt   300
tcaggattaa gtgattgctg gccaagaaac aaaagcaaaa ttgtcccatt ccccagtgga   360
ttcagatgaa aactggtaat aaaatcagga ttttattaat aaaataaaac caaaaggaga   420
caatggagaa gaaccaagct gggtctataa ggaattgcac atgagatggc acacatattt   480
```

```
atgctgtctg aaggtcacaa tcatgttacc atatcaggct gaaaatgtca ccactatccg    540
gagagtttga catgttttgt tgggaatata ttttgtctct ctgcatctgt tatgaacgca    600
ttggttggct gggktcagta ataaatatgt gaggcctttc attaaaaaaa aaaaaaaaaa    660
actcgagggg ggggccggg nacccaattc gn                                   692
```

<210> 472
<211> 2629
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2591)
<223> n equals a,t,g, or c

<400> 472

```
tgctacccca ctaaagggaa caaaagctgg agctccaccg cggtggcggc cgctctagaa     60
ctagtggatc ccccgggctg caggaattcg gcacgarccc caactcactt ggaatgtttt    120
tatatgtaat catttccctt gaagcttata ctttataagg gaagaaagaa ttcaggtgat    180
atgggaaaac tgcttggcag accttcatct tctgcctcaa ctgtaaacca catgtaaatg    240
cttaatggag actgtttttca ttcttgtgat atttaacatt cagaaaatta cttcagcttt    300
ggaaatactc aggctgtttt tattctgcag gtaagtgttt tgacttaagt actaatattc    360
cagaaatttt tgaaagcagt aaccttaatt tcctatgtat ttcattccac ttttgcatat    420
aggtcaaata gcaatgtgta tgcacattct ctttagttaa ggcaccaatt gttttggttg    480
gttttcctaa gacatacttt aaaaagatgt tctataaatt tcctarttaa attatgggga    540
ttttggagta tgtacatgat aaattataat acgtatatgg ttgaagttat tttatttttt    600
actaatgaat tattttaata ttccttattg aataaatgct gtaacttgtt tgctatggaa    660
cttattctta aagttctagt taaaaataat ttttccacat gcatgaaaat atgtattaat    720
cagaggtggc ttaattacat tgaaattgct tttttgttgt tgtttttta ctgaaataac     780
tcatgtttgt gtagaagaat gcctgtttac tcagagttta tattttcctt cagttatatt    840
ttaaatcaaa aggtctgggt aatgtatact tttgattaat atatacttt tttaaaaaac     900
aaaaaacaat gtaatggtta atagtagaaa tgtgccacac ttttcaagtt ttatataaca    960
tatgaaattc agttaaaaga atgtgtgttt cataatgact tttaactggt aaaaatatta   1020
cttgcacgaa gtacttgatg tatggttatc ctgaaatttc ggagtatttg gtgtgttctt   1080
tgtctaaaaa tagtctgttt tgtcagtcct tcagaatatt atttattctg aagattgtcc   1140
ctcttgcact tggcagttta ttttcgggga tacattgttg ggggagaggg gtttctgcca   1200
ctctttccag attgagtctg tgctgtttaa ggaggactac catcctgcaa ctctttttct   1260
aattggggca cagaggatgt cgctcaaagaa aagttgaaga gccctttcag cactttctca   1320
tctgtggaga agatggaatc ttaaaataca tttggagttt tatctgtttt acaagtccat   1380
tgatggccta agttcctcct gtttttctgct gtttgatctc taaggaactc ctgttgctaa   1440
atatgaagag tatggaacat tcatatagtc tctgtgaagc atgggggggag ggaagacatt   1500
tcttttttctt ataggcttta tgctcaaatg tcatagtctc ctttcaaaga attgtgttgc   1560
atttaaatg cacccagctt aagtagaaga cattgaagga tgcattaatt ttcaggaact   1620
attttgaatt atgaaaagat tcccaattga aaaaattatt caacaagtaa aagctaagaa   1680
atttcattga aatcataagg cagtttaagc ataaattgat aaaaatagct gtgtactact   1740
aattaataga aaatcattca accaagagaa gagtcaagtg aatatcgttt gtttatttgc   1800
tagtgagttt ctttgtaacg ttgattttat taaatgataa tatttggtta gtatgtccta   1860
tgttaataaa aatgaacaaa attaattttg ctatgttcag gtgtcttgat aaaataacaa   1920
tgctccagtg ttgttgctta catttagcac taaattttaa cacagggtca gtgagtccag   1980
gttttaactt cttcatgcct ggatgggata aaatgtaatt cattgttaaa ttaattcata   2040
tttgtattta ttaatcactg tgacaacatt aaccatttgt tcttaccagg aagtggtcag   2100
attatcatct gagttacagt tagactggct aagtttggta ttagatcaag gggaatgtcc   2160
agtaaacaga gaggtaagca tgatggaaat aatgaagtgg ggtacacagg aaaaacctga   2220
ctagtgagga ggagcagctg agagataggg tcagtgaatg cggttcagcc tgctacctct   2280
cctgtcttca tagaaccatt gccttagaat tattgtatga cacgtttttt gttggttaag   2340
ctgtaaggtt ttgttctttg tgaacatggg tattttgagg ggagggtgga gggagtaggg   2400
aagtggtcct tttacaagaa ttttgatgca taagtgtcta ttgtagggtt tggatgatct   2460
agtaaagtgt tttagaaccc cttttatcc catgcaccat tcagtaaaca taaaaatcac   2520
aattctgcta atgtcatttg gaacttcaaa ataaatatct tgtctaaaaa caaaaaaaaa   2580
aaaaaaacc ncggggggg ccccggwccc catttggccc tatgggggg                2629
```

<210> 473
<211> 2017
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2015)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2017)
<223> n equals a,t,g, or c

<400> 473
```
aggtggttca tgtatccagt ttatccagta cagttatttg tcaagcttag ctttgatttc      60
aaaggacacg cttaccttgt ctggcataag aattaatgct catgtctgca gtggttgggt     120
aggtcctgct taggagaatt aaaaaattcc tctttccgtt tggttgaatg ttgcagtcag     180
gaaccccaac tcacttggaa tgttttata  tgtaatcatt tcccttgaag cttatacttt     240
ataagggaag aaagaattca ggtgatatgg gaaaactgct tggcagacct tcatcttctg     300
cctcaactgt aaaccacatg taaatgctta atggagactg ttttcattct tgtgatattt     360
aacattcaga aaattacttc agctttggaa atactcaggc tgtttttatt ctgcaggtaa     420
gtgttttgac ttaagtacta atattccaga aatttttgaa agcagtaacc ttaatttcct     480
atgtatttca ttccactttt gcatataggt caaatagcaa tgtgtatgca cattctcttt     540
agttaaggca ccaattgttt tggttggttt tcctaagaca tactttaaaa agatgttcta     600
taaatttcct agttaaatta tggggatttt ggagtatgta catgataaat tataatacgt     660
atatggttga agttatttta tttttacta  atgaattatt ttaatattcc ttattgaata     720
aatgctgtaa cttgtttgct atggaactta ttcttaaagt tctagttaaa aataattttt     780
ccacatgcat gaaaatatgt attaatcaga ggtggcttaa ttacattgaa attgcttttt     840
tgttgttgtt tttttactga ataactcat  gtttgtgtag aagaatgcct gtttactcag     900
agtttatatt ttccttcagt tatattttaa atcaaaaggt ctgggtaatg tatacttttg     960
attaatatat actttttta  aaaaacaaaa aacaatgtaa tggttaatag tagaaatgtg    1020
ccacactttt caagtttat  ataacatatg aaattcagtt aaaagaatgt gtgtttcata    1080
atgactttta actggtaaaa atattacttg cacgaagtac ttgatgtatg gttatcctga    1140
aatttcggag tatttggtgt gttctttgtc taaaaatagt ctgttttgtc agtccttcag    1200
aatattattt attctgaaga ttgtccctct tgcacttggc agtttatttt cggggataca    1260
ttgttggggg agaggggttt ctgccactct ttccagattg agtctgtgct gtttaaggag    1320
gactaccatc ctgcaactct ttttctaatt ggggcacaga ggatgtcgct aaagaaaagt    1380
tgaagagccc tttcagcact ttctcatctg tggagaagat ggaatcttaa aatacatttg    1440
gagtttatc  tgtttttacaa gtccattgat ggcctaagtt cctcctgttt tctgctgttt    1500
gatctctaag gaactcctgt tgctaaatat gaagagtatg gaacattcat atagtctctg    1560
tgaagcatgg ggggagggaa gacatttctt tttcttatag gctttatgct caaatgtcat    1620
agtctccttt caaagaattg tgttgcattt taaatgcacc cagcttaagt agaagacatt    1680
gaaggatgca ttaattttca ggaactattt tgaattatga aaagattccc aattgaaaaa    1740
attattcaac aagtaaaagc taagaaattt cattgaaatc ataaggcagt ttaagcataa    1800
attgataaaa atagctgtgt actactaatt aatagaaaat cattcaacca agagaagagt    1860
caagtgaata tcgtttgttt atttgctagt gagtttcttt gtaacgttga ttttattaaa    1920
tgataatatt tggttagtat gtcctatgtt aataaaaatg aacaaaatta aaaaaaaaaa    1980
aaaaaactcg aggggggcc  cggaaaccaa agccncn                             2017
```

<210> 474
<211> 1414
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1411)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1413)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1414)
<223> n equals a,t,g, or c

<400> 474

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ttctgtctca aaaaaaaaaa aaaaaaggtg tgcccaggcc cctagccatt gccatgtgcc      60
cagccagaga gccaaattag agggctggct tccctatcac acagaataaa tgctagtgct     120
agccaatgat ccctttgctt ttaatgtata gaaaatactg ttgttccttt tgtcatttcc     180
agtgacatct gttttctaag cagctctttt ctagggagga aaccaaaggg gctaggttaa     240
gaccctaata gaaatgtttt ttctaatctc tggtgagtct ggaagtgtca cattcacagt     300
ccacccttgg gagtggcttg gtggagctgg ggacaaggtt ttgtttacta catagtgcac     360
atgataaatg gccttaaact gtgattcttt ctggtaggat aagttataat aaactgaccc     420
taaagaatgc aatggctttt aaactgcagt tactgtgttc ttaatgaagc aatacccaaa     480
gctctgttct tttggagcac ttgaggggag cttgaatgaa aggtgcagat aagagcagta     540
ccttgatctt atgctttctg agtgtcctgc cttgttgcca tctgcatgga tgagtgaatg     600
cttctatgca cgaggagact caagccaact cagagtctgc tttttccaac gctcttccca     660
ggtttctttt gcaaagcttg gtcatttggc ccaggtcttc ctggaaagtg gagtacatgt     720
cactgactag ggtggcgtgg tgtctttacc cttaacatta agtcttgtta cctcagtgat     780
gtgaagccaa tggttggaat tataaaaagc atccttgctg gttcttcaca ggacactgga     840
acccaccctg tcaattcagc tagcatgtcc acacagtctt gatgatccct ctctgtaaca     900
ggcagctaac attaagagaa gggggaaaga gaagaagaga gcaatagctt atgggagagc     960
tgagatctta cttcgttgac ccatattttt cccctgacca agttacctgt aaactggaat    1020
ttgcaagggg atgctgtgat gataacccct ttctattgct gtaatgttca tataacctgg    1080
gaaactgaga gaaggggatg tgtaaataaa agcttaaaca ttttagtaat gtgttaaaat    1140
gtcactctct cttaccctgt ttcccttttt tgccagatga tgattttttt attttattt    1200
tgtactttac tggatgactg tgaagcgatg agtattgggt tggggtaggt gtgttgattt    1260
tgagagtgca tgttaagaac tgaagggggaa ctacttgaga tgacttaaga agcatcccat    1320
gcaaatatct tgttttgccc taataaaata ttcagaaaga taaaaaaaaa aaaaaaaaa     1380
aaaactcgag gggggggcccg gtamccaaac ngnn                              1414
```

<210> 475
<211> 1412
<212> DNA
<213> Homo sapiens

<400> 475

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ttctgtctca aaaaaaaaaa aaaaaaggtg tgcccaggcc cctagccatt gccatgtgcc      60
cagccagaga gccaaattag agggctggct tccctatcac acagaataaa tgctagtgct     120
agccaatgat ccctttgctt ttaatgtata gaaaatactg ttgttccttt tgtcatttcc     180
agtgacatct gttttctaag cagctctttt ctagggagga aaccaaaggg gctaggttaa     240
gaccctaata gaaatgtttt ttctaatctc tggtgagtct ggaagtgtca cattcacagt     300
ccacccttgg gagtggcttg gtggagctgg ggacaaggtt ttgtttacta catagtgcac     360
atgataaatg gccttaaact gtgattcttt ctggtaggat aagttataat aaactgaccc     420
taaagaatgc aatggctttt aaactgcagt tactgtgttc ttaatgaagc aatacccaaa     480
gctctgttct tttggagcac ttgaggggag cttgaatgaa aggtgcagat aagagcagta     540
ccttgatctt atgctttctg agtgtcctgc cttgttgcca tctgcatgga tgagtgaatg     600
cttctatgca cgaggagact caagccaact cagagtctgc tttttccaac gctcttccca     660
ggtttctttt gcaaagcttg gtcatttggc ccaggtcttc ctggaaagtg gagtacatgt     720
cactgactag ggtggcgtgg tgtctttacc cttaacatta agtcttgtta cctcagtgat     780
gtgaagccaa tggttggaat tataaaaagc atccttgctg gttcttcaca ggacactgga     840
acccaccctg tcaattcagc tagcatgtcc acacagtctt gatgatccct ctctgtaaca     900
ggcagctaac attaagagaa gggggaaaga gaagaagaga gcaatagctt atgggagagc     960
tgagatctta cttcgttgac ccatattttt cccctgacca agttacctgt aaactggaat    1020
ttgcaagggg atgctgtgat gataacccct ttctattgct gtaatgttca tataacctgg    1080
gaaactgaga gaaggggatg tgtaaataaa agcttaaaca ttttagtaat gtgttaaaat    1140
```

```
gtcactctct cttaccctgt ttcccttttt tgccagatga tgattttttt attttattt    1200
tgtactttac tggatgactg tgaagcgatg agtattgggt tggggtaggt gtgttgattt    1260
tgagagtgca tgttaagaac tgaaggggaa ctacttgaga tgacttaaga agcatcccat    1320
gcaaatatct tgttttgccc taataaaata ttcagaaaga taaaaaaaaa aaaaaaaaa    1380
aaaactcgag ggggggcccg gtamccaatk cg                                  1412
```

<210> 476
<211> 884
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (77)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (771)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (796)
<223> n equals a,t,g, or c

<400> 476
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aggggtttat aggcacgaga ccctgcaccc aacctagagt tgcctttttt aagcaaagca      60
gtttctagtt aatgtancat cttggacttt ggggcgtcat tcttaagctt gttgtgcccg     120
gtaaccatgg tcctcttgct ctgattaacc cttccttcaa tgggcttctt cacccagaca     180
ccaaggtatg agatggccct gccaagtgtc ggcctctcct gttaaacaaa aacattctaa     240
agccattgtt cttgcttcat ggacaagagg cagccagaga gagtgccagg gtgccctggt     300
ctgagctggc atccccatgt cttctgtgtc cgagggcagc atggtttctc gtgcagtgct     360
cagacacagc ctgccctagt cctaccagct cacagcagca cctgctctcc ttggcagcta     420
tggccatgac aaccccagag aagcagcttc agggaccgag tcagattctg ttttgtctac     480
atgcctctgc cgggtgccgg tattgaggca cccagggagc tgttactggc gtggaaatag     540
gtgatgctgc tacctctgct gctgcactca cagccacact tgatacacga tgacaccttg     600
cttgtttgga aacatctaaa catctagtag atgacttgca ggctgttggc taccagtttc     660
ctgtctgagg tgtatatgtt aacttcgtga tcagtttgta tgtttgggac tcttgtccta     720
tgtaaagtta aggtgggccg ggtgcagtgg ctcacgcctg taatcctaac nctgggaggc     780
cgaggcgggt ggatcncctg atggtgaaac ctcatctcta cttgaaaata caaaaattag     840
ctgagtggtg aaaaaaaaaa aaaaaaaaaa aaaactcgag gggg                      884
```

<210> 477
<211> 875
<212> DNA
<213> Homo sapiens

<400> 477
```
ggaarggttg taggacttaa tcacgtttca gcttggctgt cgggctgtga gtcacggttg      60
cactgcgatt atgtaagcac gcaggaatag gtggcatgac atatatgctg ccagcagcca     120
cgggcctcgc ccttccgagt caccactact ttttaagcct ttttkgrat acaagtttct     180
tkgggttcat ctttgraatg raaatgraag catgattgca gaataggcag amcaggaatt     240
atccatcaat cagagagamc ccagaccttt aagagaagct ggaattagaa tatggaattc     300
ctgagccttg agctggcata gccgagccct ggtttatgct cttcctgcct ccctcctttt     360
ttccctcctg cctgtgtgct ccacttcctc tcctgagact cccccaaggt agcatcactc     420
ccaccaggag ccttaggcag gaaaagtaag gcccagagaa gggactgtcc ctggggacgt     480
gcactgagtg tgtgtgaggg tgcggggcag gaataggagt gccaggagtc tacctctgga     540
gcaatgcctc ccacagtatt tctgtagggg aaaggataga aactcacttc ttgggttcct     600
ccaatcacca tgcacatgtc agtccttcag ctatcaatgc aaaggaaacc cagaactgag     660
atttgagctt tctcaccatc tccatggtca gatatctcca ctgccaaagg gttcattccg     720
```

```
cctctgggtt tatctctttc ttcatgcttc ttcctggcag tgtcctgttg aagcttacct      780
tcccatctgt gtttgcatcc actccctaaa aactacaaga caaaaaaaaa aaaaaaaaac      840
tcgaggggggg gcccggtacc caattcgggc tatag                                875

<210> 478
<211> 753
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (706)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (741)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (746)
<223> n equals a,t,g, or c

<400> 478
gaattcggca cgagctcgtg ccgaattcgg cagacgatac caggtgctgc agaagggatt      60
ccatgaggtg cgcaaaggcc ctacttccgc tttcaccttg gagacggcga ctctctgcgt      120
actgattgga acatccgcga aatgatacgc ctctctgcaa tgctattggt cgaaatgcat      180
gtcaatctcc cagcgtcttt atccgtgttc cttgactctg ggcaacttaa aagccctaat      240
actttactt tcgccacaca aagaggttct tcttagtgga gggagagcag atgtagggca      300
tcctaccgag aatttccgga accacgtgcg agatgatgcc agtcatgaac gtctccgcgc      360
ttcctttcgc tttggaaata tccttaagta gaaaagaaat tttctgagct ttgcctaaaa      420
ctagaatctg tgttgaggtt tttcaaaatt aagtaacgcc agagacatac tgtgacgtga      480
ggaaacgctc ttaaatgaaa ttttaagatc tatttgagaa acatgtacta aaaatgtact      540
gacctcctat taatgccagg cgctatgctg aattctgggc cttcacattg tccttccatt      600
attagaactg aagcccagat tatttgaaac aaaaaataaa cttcaataat ttattaaaaa      660
aaaaaaaaaa aaamctcgag gggggggcccg gtacccaatt cgcccnaaag ggaggcggat      720
taaaattccc tgggccggcg ntttanaaag gcg                                  753

<210> 479
<211> 690
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (352)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (407)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (439)
<223> n equals a,t,g, or c

<400> 479
ggataattct acttcttccc ttccagtctg gagggcttta tttcttttc ttgcctaatt      60
```

287

```
gtgctggcta caacttccaa tacaaaatga gtctctcttt tttttctttg tcggtctagc    120
taaaggtttg ccaattttct tgatctgttt aaagagccag tttgactttc attgatggtc    180
tttatttttc tgttgtctat tttatttgtc tcagcyctgg tctttattac ttcctttctt    240
ctgttagcat tggatttagc ttgctcttct cttttcaggt ttcttgtggt ataaaatcag    300
atggttgact tgagctcatt tttcttatgt ggatgttcac agctatgaat tntcctctga    360
gtgctgcttt tcctgcatcc ctgagctgtc tcgtgggttt ttttgtntca tttatctcca    420
catagtcatt tctgcttttnc cttgtgattt cttctctggc ccattggttg ttttaaaata    480
tgctgtttaa ttctcacaga tctctagata gtacagggaa aaaaccaccc tgtctaaaat    540
tgtgctgcaa cttttagtgt ccaagctgaa tgaagggagt ccccacttga tcaatgcagt    600
gtggtttttgg gtggcttgtc tctgtcaagg agatcttcat tacaatgatg aaaaacaaaa    660
aaaaaaaaaa aaaaaaaaaa aaaactcgag                                       690
```

<210> 480
<211> 1512
<212> DNA
<213> Homo sapiens

<400> 480
```
aaaaaatgca aagaatttgt aggtatgatt agtgcattat aggtgttttc aaatttctcc     60
tatgataaat taaaaatgta atgttgggca ttaatttcct aaacccaatg ctcagcaatt    120
ttctcaaatt gtttacagtt tttccaagag acttcagaac cattccctgg agtgaattat    180
ttccaatggt gaagagtaat ggatggatgg catgagattc tcaaaaaaat cttgctccta    240
tttcagaagt gtcactccag cccccttgaag gtccaggaaa cctggctgag tagtgtggtc    300
tatggaggtg catgggcttc agaatcaggc caacgttgat cctgagtccc agccagctgc    360
ttagtagctg tgggatagtt acacaagaca catctacaag aaaagtcatg ataaaattga    420
ttgcaaaaac agcaatttga aaawttctt attgtattca tgtccttgga aatggctttt    480
atagtcgttc ctatcaagag acagattctg tttcccaaac cttgaacttc tcttgactta    540
tctgcactgg cacagggtgc cagtttgggg cccaggttta aaggtcctaa atgcttctgt    600
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aatggcccgg ctgagcccag cctaaatttc taaccagctc aatcctgagc tagtatgttt    840
cgggattgtt atgcagttat aagttagtaa tatatacacc cattaaagac aggatctcag    900
gacagattga tcacaaataa cctgcaaatg cttgccaccc tgtaagtatt gattttcttt    960
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aggagaatar ggtytggagr cagggaactt aakgccaatt cgtgctgact tcctacaaga   1080
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gtgggccaag cacaggccat gccttcatct gcatagggta ccaattcgcc tcaacctttg   1320
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agtacttaaa acccagaaaa cattgtaacc gggtccttgg gcggcttgct ggggctcaca   1440
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<210> 481
<211> 2120
<212> DNA
<213> Homo sapiens

<400> 481
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cagtgtttta tttcttcaat ggctaatatc tataatgaaa agatactgaa ggaagggaac    180
cagctcactg aaggcatctt catacagaac agcaaactct atttctttgg cattctgttt    240
aatgggctga ctctgggcct tcagaggagt aaccgtgatc agattaagaa ctgtggattt    300
ttttatggcc acagtgcatt ttcagtagcc cttattttgt taactgcatt ccagggcctt    360
tcagtggctt tcattctgaa gttcctggat aacatgttcc atgtcttgat ggcccaggtt    420
accactgtca ttatcacaac agtgtctgtc ctggtctttg acttcaggcc ctccctggaa    480
ttttcttgg aagccccatc agtccttctc tctatattta tttataatgc cagcaagcct    540
caagttccgg aatacgcacc taggcaagaa aggatccgag atctaagtgg caatctttgg    600
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gagcgttcca gtggggatgg agaagaacta gaaagactta ccaaacccaa gagtgatgag    660
tcagatgaag atactttcta actggtaccc acatagtttg cagctctctt gaaccttatt    720
ttcacatttt cagtgtttgt aatatttatc ttttcacttt gataaaccag aaatgtttct    780
aaatcctaat attctttgca tatatctagc tactccctaa atggttccat ccaaggctta    840
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cttcaagctt ccaaaaaact tgtaataatc atgttagcta tagcttgtat atacacatag   1020
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agaatcatac cagattgtca gtgaagctga tgcctaggaa cttttaaagg gatcctttca   1620
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ggtgatgata gaagagtggg ctttaactgg caggcctgta tgtttacaga ctaccatact   1920
gtaaatatga gctttatggt gtcattctca gaaacttata catttctgct ctcctttctc   1980
ctaagtttca tgcagatgaa tataaggtaa tatactatta tataattcat ttgtgatatc   2040
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aaaaaaaaaa aaaaaaaaa                                                  2120
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<210> 482
<211> 846
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (775)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (807)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (821)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (835)
<223> n equals a,t,g, or c

<400> 482
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cccctctgtc ttctctttcg actttgcagc tgtacttgtt ttgctcctct acccgcagag    180
ctgacatgga cccaaatcct cgggccgccc tggagcgcca gcagctccgc cttcgggagc    240
ggcaaaaatt cttcgaggac attttacagc cagagacaga gtttgtcttt cctctgtccc    300
atctgcatct cgagtcgcag agaccccca taggtagtat ctcatccatg gaagtgaatg    360
tggacacact ggagcaagta gaacttattg accttgggga cccggatgca gcagatgtgt    420
tcttgccttg cgaagatcct ccaccaaccc cccagtcgtc tggggtggac aaccatttgg    480
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aggagctgag cctgccggtg cctacatcag acaggaccac atctaggacc tcctcctcct    540
cctcctccga ctcctccacc aacctgcata gcccaaatcc aagtgatgat ggagcagata    600
cgcccttggc acagtcggat gaagaggagg aaaggggtga tggaggggca gagcctggag    660
cctgcagcta gcagtgggcc cctgctacag actgaccacg ctggctattc tccacatgag    720
accacaggsc cagccagagc tgtcgggaga agaccagact ctttacttgc agtangcacc    780
akaagtggga aggatggtgg gatgggnacc tttctaagaa ntaacccttt tctgntttac    840
tggtaa                                                                846


<210> 483
<211> 652
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1)
<223> n equals a,t,g, or c


<400> 483
naggtaccgy ccggaattcc cgggtcgacc cacgcrtccg gtcccgagga gggcgcgccc     60
yctgccacct cggccgagag gactaatggg ggtgcggagc cgcgcctggg cttttctgac    120
attcacttca actctcgcaa cacgttccag gtgagccgcg gtcagagcgc ccgcgatcac    180
ctgcccccgg cggggccgcc ggtgcccttg cccgccgcgg agcagggtcc tgcgggggct    240
tcggcccggg ctcgacggag tggcggcttc gcggacttct tcaccagaaa ccttttttcca    300
aaaaggacaa aggaactcaa atcagttgtc catagtgctc ctggttggaa attatttggt    360
aaagtccctc ctagagagaa tcttcagaaa acatccaaaa tcattcagca ggaatatgaa    420
gcacgaacgg ggaggacctg taaaccacca cctcagtctt caagacgcaa gaattttgaa    480
tttgagccgc tttctaccac tgccttgatt cttgaggatc gaccatcaaa tcttcctgcc    540
aaatctgtgg aagaagcttt acgtcaccga caagaatacg atgagatggt ggctgaggct    600
aaaaaacgag aaattaagga agcacataaa aaaaaaaaaa aagggcggcc gc             652


<210> 484
<211> 2909
<212> DNA
<213> Homo sapiens


<400> 484
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cgggagcgcc caggccgtgt agcctttgat gggatcaccg tcttctactt cccccgctgc    180
cagggcttca ccagtgtgcc cagccgtggt ggctgtactc tgggtatggc ccttcgccac    240
agtgcttgcc gtcgcttctc tttggctgag tttgcgcagk agcaagcccg tgcacggcac    300
gagaagctcc gccagcgctt gaaagaggag aagttggaga tgctgcagtg gaagctttcg    360
gcagctgggg tacccccaggc agaggcaggg ctgccacctg tggtggatgc cattkatgac    420
gcctctgtgg aggargactt ggcagtcgct gtggcargtg gccggttgga agaagtgagc    480
ttcctacagc cctacccagc ccggcgmcgt cgagctctgc tgarggcttc aggtgtgcga    540
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aagtgccaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac    720
cccatgggcc gtgtggaatt taatcaggca agagttcaga cccatttmat ccacacactc    780
acccgcctgc agttggaaca ggaggctgag agctttaggg agctggaggc ccctgcccag    840
ggcagcccac ccagccctgg tgaggaggcc ctggtcccta cttccccact ggccaagccc    900
cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttcyaca    960
gcatcttcat cagcatcggg cactagtgag gctcctgact gccccaccca cccaggcctg   1020
cctggccctg gcttccagcc tggcgttgat gatgacagcc tggcacgcat cttgagtttc   1080
agtgactctg acttcggtgg ggaggaggag gaagaggagg aagggagcgt ggggaacctg   1140
gacaacctca gctgcttcca tccagctgac atctttggta ctagtgaccc tggtggcctg   1200
gccagctgga cccacagcta ttctggctgt agcttcacat caggcrtcct ggatgagaat   1260
gccaacctgg atgccagctg cttcctaaat ggtggccttg aagggtcaag ggaaggcagc   1320
cttcctggca cctcagtgcc acccagcatg gacgctggcc ggagtagctc agtggatctc   1380
agcttgtctt cttgtgactc ctttgagtta ctccaggctc tgccagatta tagtctgggg   1440
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290

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cctcactaca catcacagaa ggtgtctgac agcctggaca acatcgaggc acctcacttc      1500
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ggcttctccg agccagccgc cgaagcccta gatcccttta ttgacagcca gtttgaggac      1620
actgtcccag catctctaat ggagcctgtg ccggtgtgag gaccaggatg tcttttccca      1680
gccccaagag acctgttgct gctttcttgt aattatgggg ctccccagag tctgcgtaac      1740
agtctcccac tggctggctc acccacaggt gccatgtgca cactcctggt tttcaaacaa      1800
ttctctggat ttatttattt gttttaactt ttctgtgctg aagagaggac tagggggagg      1860
gggcttcccc tttcagctgc ccggcccccc acacccacag cttgctcttc tatctccaca      1920
acgtgagcct ggaagaggag aaaatgtggc tcctctggag cttggcagac cacttttcgg      1980
tctttgcgtg atgttcctta gcccaaagac ggtgagacag ggctgaaatc aggtggcttc      2040
tgccaccctg agccctagac ccatgggtgg ctaaatccac tggactgtga agactataat      2100
ttatttccat aatttatttg gagattgagg aggctttggt tgcacttctt ggctggtgg       2160
gtaatgccag gggtggggtg ggcacaggcc ctcaagagcc ccttttgcct tgtagtccta      2220
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gtctgctgcc tggctcctag atggctctgc gggcaggtgc tggccaagga catcatctag      2340
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caggcccagg gatgtaggag ggggaaggag gaaacaggaa gcccagagag ggcaaagggc      2520
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ttcagcgtgg cccacctgcc catgccctga ggccagttgg cgaggggtgg ctcctgaggg      2640
tttttatacc ctttgtttgc taatgtttaa ttttgcatca taatttctac attgtccctg      2700
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tgggcctgcc ccttgcccag gaggccttgc cagcctgtgt gcttgtggga acaccttgta      2820
cctgagctta caggtaccaa taaagaggct ttatttttaa aaaaaaaaa aaaaamaama      2880
aaaaaaaaaa aaaaaaaaag ggcggccgc                                        2909
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<210> 485
<211> 2918
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2910)
<223> n equals a,t,g, or c

<400> 485
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aattcggcac aggggcagtc tggcatgatc tttttggagg taagttgtgc ctcactgaaa        60
actaatcccc agcccatctt tgcctgcttt ctagccctgt ctatcctgaa gcgggctcgc       120
cgggagcgcc caggccgtgt agcctttgat gggatcaccg tcttctactt ccccgctgc        180
cagggcttca ccagtgtgcc cagccgtggt ggctgtactc tgggtatggc ccttcgccac       240
agtgcttgcc gtcgcttctc tttggctgag tttgcgcagk agcaagcccg tgcacggcac       300
gagaagctcc gccagcgctt gaaagaggag aagttggaga tgctgcagtg gaagctttcg       360
gcagctgggg taccccaggc agaggcaggg ctgccacctg tggtggatgc cattkatgac       420
gcctctgtgg aggargactt ggcagtcgct gtggcargtg gccggttgga agaagtgagc       480
ttcctacagc cctacccagc ccggcgmcgt cgagctctgc tgarggcttc aggtgtgcga       540
aggatcgatc gggaggagaw gcgggagctg cargcactgc gccaatcccg ggaggattgt       600
ggctgtcact gcgataggat ctgcgaccct gagacctgca gctgcakcct ggcaggcatc       660
aagtgccaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac       720
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cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttcyaca       960
gcatcttcat cagcatcggg cactagtgag gctcctgact gccccaccca cccaggcctg      1020
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agtgactctg acttcggtgg ggaggaggag gaagaggagg aagggagcgt ggggaacctg      1140
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gccaacctgg atgccagctg cttcctaaat ggtggccttg aagggtcaag ggaaggcagc      1320
cttcctggca cctcagtgcc acccagcatg gacgctggcc ggagtagctc agtggatctc      1380
agcttgtctt cttgtgactc ctttgagtta ctccaggctc tgccagatta tagtctgggg      1440
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291

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cctcactaca catcacagaa ggtgtctgac agcctggaca acatcgaggc acctcacttc    1500
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ggcttctccg agccagccgc cgaagcccta gatcccttta ttgacagcca gtttgaggac    1620
actgtcccag catctctaat ggagcctgtg ccggtgtgag gaccaggatg tcttttccca    1680
gccccaagag acctgttgct gctttcttgt aattatgggg ctccccagag tctgcgtaac    1740
agtctcccac tggctggctc acccacaggt gccatgtgca cactcctggt tttcaaacaa    1800
ttctctggat ttatttattt gttttaactt ttctgtgctg aagagaggac tagggggagg    1860
gggcttcccc tttcagctgc ccggcccccc acaccacag cttgctcttc tatctccaca    1920
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tgccaccctg agccctagac ccatgggtgg ctaaatccac tggactgtga agactataat    2100
ttatttccat aatttatttg gagattgagg aggctttggt tgcacttctt tggctggtgg    2160
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tgggcctgcc ccttgcccag gaggccttgc cagcctgtgt gcttgtggga acaccttgta    2820
cctgagctta caggtaccaa taaagaggct ttattttttaa aaaaaaaaa aaaaacttcg    2880
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<210> 486
<211> 2918
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2910)
<223> n equals a,t,g, or c

<400> 486
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cgggagcgcc caggccgtgt agcctttgat gggatcaccg tcttctactt ccccccgctgc     180
cagggcttca ccagtgtgcc cagccgtggt ggctgtactc tgggtatggc ccttcgccac     240
agtgcttgcc gtcgcttctc tttggctgag tttgcgcagg agcaagcccg tgcacggcac     300
gagaagctcc gccagcgctt gaaagaggag aagttggaga tgctgcagtg gaagctttcg     360
gcagctgggg taccccaggc agaggcaggg ctgccacctg tggtggatgc cattkatgac     420
gcctctgtgg aggargactt ggcagtcgct gtggcargtg gccggttgga agaagtgagc     480
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ggctgtcact gcgataggat ctgcgaccct gagacctgca gctgcakcct ggcaggcatc     660
aagtgccaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac     720
cccatgggcc gtgtggaatt taatcaggca agagttcaga cccatttmat ccacacactc     780
acccgcctgc agttggaaca ggaggctgag agctttaggg agctggaggc ccctgcccag     840
ggcagcccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc     900
cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttcyaca     960
gcatcttcat cagcatcggg cactagtgag gctcctgact gccccaccca cccaggcctg    1020
cctggccctg gcttccagcc tggcgttgat gatgacagcc tggcacgcat cttgagtttc    1080
agtgactctg acttcggtgg ggaggaggag gaagaggagg aagggagcgt ggggaacctg    1140
gacaacctca gctgcttcca tccagctgac atctttggta ctagtgaccc tggtggcctg    1200
gccagctgga cccacagcta ttctggctgt agcttacat caggcrtcct ggatgagaat     1260
gccaacctgg atgccagctg cttcctaaat ggtggccttg aagggtcaag ggaaggcagc    1320
cttcctggca cctcagtgcc acccagcatg gacgctggcc ggagtagctc agtggatctc    1380
agcttgtctt cttgtgactc ctttgagtta ctccaggctc tgccagatta tagtctgggg    1440
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292

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cctcactaca catcacagaa ggtgtctgac agcctggaca acatcgaggc acctcacttc    1500
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ggcttctccg agccagccgc cgaagcccta gatccctta ttgacagcca gtttgaggac    1620
actgtcccag catctctaat ggagcctgtg ccggtgtgag gaccaggatg tctttttccca    1680
gccccaagag acctgttgct gctttcttgt aattatgggg ctccccagag tctgcgtaac    1740
agtctcccac tggctggctc acccacaggt gccatgtgca cactcctggt tttcaaacaa    1800
ttctctggat ttatttattt gttttaactt ttctgtgctg aagagaggac taggggggagg    1860
gggcttcccc tttcagctgc ccggcccccc acacccacag cttgctcttc tatctccaca    1920
acgtgagcct ggaagaggag aaaatgtggc tcctctggag cttggcagac cacttttcgg    1980
tctttgcgtg atgttcctta gcccaaagac ggtgagacag ggctgaaatc aggtggcttc    2040
tgccaccctg agccctagac ccatgggtgg ctaaatccac tggactgtga agactataat    2100
ttatttccat aatttatttg gagattgagg aggctttggt tgcacttctt tggctggtgg    2160
gtaatgccag gggtgggggtg ggcacaggcc ctcaagagcc ccttttgcct tgtagtccta    2220
caccttgccc tgcctgggct ttggtgcaga ctaggtgtgg atttgagctc tgtgatctat    2280
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caggcccagg gatgtaggag ggggaaggag gaaacaggaa gcccagagag ggcaaagggc    2520
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ttcagcgtgg cccacctgcc catgccctga ggccagttgg cgaggggtgg ctcctgaggg    2640
tttttatacc ctttgtttgc taatgtttaa ttttgcatca taatttctac attgtccctg    2700
agtgtcagaa ctataattta ttccatttct ctctgtgtct gtgccaagaa acgcaggctc    2760
tgggcctgcc ccttgcccag gaggccttgc cagcctgtgt gcttgtggga acaccttgta    2820
cctgagctta caggtaccaa taaagaggct ttattttaa aaaaaaaaa aaaaacttcg    2880
gggggggggg cccggtaacc caatttgggn cctttaag                           2918
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<210> 487
<211> 1891
<212> DNA
<213> Homo sapiens

<400> 487
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ccacgcgtcc ggtcctggga gactctgagc atcccctttg tgaggaaggt ggtgtgctac    60
gtgaacatga acctcatgga tgcctccgtg cctcccctgg cccttgggct gctggagagt   120
gtgaccttga gcagcccagc cctgggccag ctggtcaaga gcgaggtgcc cctggatagg   180
ctgctggtgc acctacaggt gatgaaccag cagctgcaaa ccaaggccat ggccctgctg   240
acagccttgc tgcagggggc cagccctgtg gaacgcaagc acatgcttga ctatctttgg   300
cagaggaacc ttcgccagtt catctataag aacatcatcc acagtgcagc accaatgggc   360
gacgagatgg ctcatcacct gtacgtactg caggctctca tgctgggggct gctggagccg   420
cgcatgcgga cgcccctgga cccctacagc caggagcagc gggagcagct gcaggtccta   480
cgccaggctg ccttcgaggt ggagggggag tcctcgggtg ccgggctaag tgctgaccgt   540
cgccgttccc tctgtgcccg agagttccgc aaactgggct tttctaacag caacccagca   600
caggacctgg agcgcgtgcc ccccggtctg ctggccctgg acaacatgtt gtacttctcc   660
agaaacgcgc ccagcgcgta cagccggttt gtgttggaga acagcagccg cgaggacaag   720
cacgagtgcc cctttgcccg gggcagcatc cagctgacgg tgctgctgtg tgagctgctc   780
cgtgttgggg agccctgctc tgagacagcc caggacttct cacccatgtt cttcggccaa   840
gaccagagct tccacgagct cttctgtgtg ggcatccagc tgttgaataa gacctggaag   900
gagatgcggg ctacacagga ggacttcgac aaggtcatgc aggtggtgcg ggagcagctg   960
gcccgcactc tggccctgaa gcccacttcc ctggagctct tccgaaccaa ggtgaatgcg   1020
ctcacttatg gggaggtgct gcggctgcgg cagactgaac ggctgcacca ggagggcaca   1080
ctggctcccc ctatactgga gctgcgggag aagctgaagc cagagctcat gggcctgatc   1140
cgccagcagc gcttgctccg cctctgtgag gggacgctct ccgcaagat cagcagccgg   1200
cggcgccagg ataagctgtg gttctgctgc ctgtcccca accacaagct gctgcagtac   1260
ggagacatgg aggaggggcgc cagcccgcct accctggaga gtctgcccga gcaactccct   1320
gtggccgaca tgagggcact cctgacaggc aaggactgcc cccatgtccg ggagaagggc   1380
tccgggaagc agaacaagga cctctatgag ttggccttct caatcagcta tgaccgtggg   1440
gaggaggaag cgtacctcaa cttcattgcc ccctccaagc gggagttcta cctgtggaca   1500
gatgggctca gtgccttgct gggcagtccc atgggcagcg agcagacacg gctggacctg   1560
gagcagctgc tgaccatgga gaccaagctg cgtctgctgg agctggagaa cgtgcccatc   1620
cccgagcggc cacccccctgt gcccccaccc cccaccaact tcaacttctg ctatgactgc   1680
agcatcgctg aaccttgaca gtgtggctgg ccatgggcca cagctgcggc actgcagcag   1740
```

```
ccatgaaggg cagtgggtag aggagtgcag gcaccctgac cagcagagat tgctgcagaa    1800
ataaagtctg cttggctctt gggaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a                                    1891


<210> 488
<211> 1487
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (432)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1024)
<223> n equals a,t,g, or c

<400> 488
gaattcccag tcgctacttc ctaaaatcaa ttttgaagtt taatcgatat catttgaggt      60
ccctgcggct tttaatttgt tattcatagc agccaattct ttctcctgct gcttcttgag     120
atacctttgc gccgtagcag tcacaatttg aatgaagaag ttaatgagca ttaatagtac     180
tacagtgttc caaactgaag ctaatgagag atcccacttt ttcacctgat aagaatgaag     240
gttttacgaa aaatcattga caaaaataag gtattgtaaa aatgaacctc acaaggttgc     300
ctcgtcaaat gaagatacct ttatattgga ggtcacatga gatggggttg tcatatactt     360
gtcttttatg gcatgcaatt tggcaacaag gttggggagg atagatcaaa acccaggtat     420
gaagctgaga anccaaatca actcattctc tatccagtta agtagttgat tattgcagac     480
tgatatgatg aaaattgtct gcaaaagata attaatataa tcaagaaaac ttccttaatc     540
ttacagatca aggtttaatt tgccaagact ccaactccta tagcttcata atgatgtttt     600
tgtgatcaga gaaattaatt gcatttatat tgcgtttaga aggattaaac aaacttttga     660
aatgtagtaa aaaggttaaa aaaaagcaaa gcactcaata tacccagcaa aataaatcaa     720
gaaataactc caaacgacat cagtagtcca aatcgtgtgg aaaaagacct tcacaaacct     780
gtatgtgagt tttaataatt gcttttccaa ccatcgtagc cagaaaaaac ttccagaaag     840
gaattccaaa ttgtccacac ataatgccag caaggtcgaa tagaggattt ggcacctaca     900
aaagttattc gagttaatcc acaaaatact tgccgataaa ctgttagaca cacatattag     960
tgaaccaggg ctctataaat tattccatgt gtcgatatat agacgcgaga atatattttc    1020
ttgnatcact ctgccaaatt gacacattga caggtatttt atgaagcagc attgktagat    1080
aacaggtgtg tgtgagaaaa aatcaaattt agtgcaaaaa agaagaatca aactaaccga    1140
agcaagcacc aacacagtaa agaagttcaa atactgtgca tgtgaaagga accagcgctt    1200
aaattgattc agacgggtag ctatccaccc atcatcttct gaagaagaag cgctcaattc    1260
ttccactgta tctagttttc cacctgataa gcttgctgca tgaaattatt aattatgtgt    1320
ttaattacct ttggcaactt aaaaaacaga attaaaaaac tttgaccaaa ttcaagattg    1380
atagtcttag catgtatggt ttatgacctt tcaaagatta tacaaaccgc gaatcgtaga    1440
aaacctatat cagatcaact acaagttaca aaagcaagca gctcgag                  1487

<210> 489
<211> 262
<212> DNA
<213> Homo sapiens

<400> 489
cggcacgaga aaagatcaag tccaagccat taaatgtaac atctaacagt ctccatgacc      60
tggcctcttt aatttgtaac cttccaccct ttactttgaa ctttttctgcc aagagcactg     120
agcttccttt atgttttgc ccatagttgg gagcccccta tctggaatat gctcttaccc     180
ctttgctggt ctagctccta ctctattttt attttctggg caacagagcg agactcttgt     240
ctcgaaaaaa aaaaaaaaa aa                                                262

<210> 490
<211> 773
<212> DNA
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294

<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (769)
<223> n equals a,t,g, or c

<400> 490
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accaaaatca aggggatttt ccaaaatgtc gtaacaantc cgccccattg acgcaaatgg    60
gcggtaggcg tgtacggtgg gaggtctata taagcagagc tggtttagtg aaccgtcaga   120
tccgctagcc gcaattactg tgagttagct cactcattag gcaccccagg ctttacactt   180
tatacttccg gctcgtatat tgtgtggaat tgtgagcgga taacaatttc acacaggaaa   240
cagctatgac cttgattacg ccaagctcga aattaaccct cactaaaggg aacaaaagct   300
ggagtcgcgc gcctgcaggt cgacactagt ggatccaaag aattcggcac gagcgttacc   360
ggatctgcgt ggggctggtg gtggttggtg tcctgctcat catcctgatt gtgctgctgg   420
tcgtctttct ccctcagagc agtgacagca gtagtgcccc acggacccag gatgcaggca   480
ttgcctcagg gcctgggaac tgacccagct ggtcctgaag gagaagccaa atggctgcac   540
tggccgattc tggtctccag aggaccttgg tgtttgctct cccttgaccc accccagtga   600
gtgccaaagg gcagccccaa catgtgcacc cctgcatttc ctgtcatgcc acagactggc   660
ccttgagggc agcctgctgt actggccatg ctggccagcc ccacctggag ctcagtaaaa   720
actgctgttt gattaaaaaa aaaaaaaaaa aactggaggg ggggcccgna acc           773
```

<210> 491
<211> 218
<212> DNA
<213> Homo sapiens

<400> 491
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ggcacgagga tagaggtatt ttctgtggcc ctgggagctg tctgtctttc ccctaccccc    60
aaggatgcca ggaagacgtc caccattagc catgtggcaa cctttacttc tatgcctcac   120
aagtgccttt cagagagccc caattctgct ttcccacaaa ataaacctaa tgccatcagg   180
caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa                            218
```

<210> 492
<211> 488
<212> DNA
<213> Homo sapiens

<400> 492
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ggcacgagca ggtctaatca tgcctctccc tgcctaaaac cttcccctgg ctcctattct    60
ggaagagtgt cgtagggcag catgtaaaac gccacacatg ccccgcccag cctgcctttt   120
aatcttcatc tctggccaca ctcttctagc actgcctgtc tgcccagctc ccgcccatgc   180
cccccgccc cgcgcagctt ctgtcctgta accatcttcc ccacaatatg ccatcattcc    240
ccctgttaat agctctgccc ttgcccactg tcctatcctg gaatgacttt ccctcatcct   300
tctttcttct aatgacctcc tattcatccc tcaaaaccca gtgcaaagga tcccatgatc   360
tcctgcctcc aggcaaaatg actcaccttc ctcctcaggc caccccagct cccactattg   420
gcgatcccat catcctttgc taacacacca cctcctggat cacctgggca acaaaagcgg   480
aaatccgt                                                            488
```

<210> 493
<211> 1269
<212> DNA
<213> Homo sapiens

<400> 493
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gaggattctt taacaaaata gggacaatga caaggttact ggtagccctt ttattctcct    60
```

295

```
cattttttaaa gctgagagag gtggaatcca ttagtaagat aaaaaacaaa atgtcaaaaa    120
gacaagactt aagaacaggt tgggcatgct ccaacatgac agcatgcaca ctttgggggaa   180
aaatttattg gtctagccag gtgtgagcct ccattcctta atgtgccagc tggactcccc   240
ttaccaaatc ttggccccaa gagtttgttt ccagtcagtg ggctttgcta tactgacaga   300
catgttccat acaggagctt ctgatgggca aacagtgggt gatacagtca cactcactac   360
cttctacctc ctgtcttctc tcaatgccag tgacctacca ccatgctgcc cagaaccttc   420
ccatcaggca aataaaaacc tgcatatttg tcacacactt tgggtctata tagaccatta   480
acaaagtgat gaaaacatct ggtgctaaat gacagcatga tgtggcatct cttgcctggc   540
ccagccaagg atcagagagt gaacaggact tggtaaatag cttctctcat ctttctctct   600
ctgccctaag caagtaaaac taaaaaccac aacaataaat aaactcataa caccctcagt   660
ttcttcctct tttttttttt taccatctga tagatgtcag gacagatgtt gtccacaaca   720
cacttgccaa caaccatttc agtgcttcct gacatatgtt taagaaagat ggctgctgta   780
taacggattt tacttaaatg ccgataagca accttccata acattgttca gcgaagataa   840
aagataatgc cacttctgtc cattctggtg cccatgtcaa catgatcact aattcaaatt   900
tttagggatc aaaaaagtca acaccaagct tatataaata gcttttacca tctggttgct   960
caccttgact gtaggaagca gagtcctatc aattctttc tactaggaaa aaggtgtctc   1020
atcatagaga ggaaggggag gaataataaa agaaaaacaa tttgtaatag catgctatcc   1080
cttttttcct gttgacagga aatcaagttc tcagcttgtt aattaagtta aaaatacaga   1140
agtttcctgg ttattctctc atcagtttca gagtgttcat gactttgaag taggtctcac   1200
cggtgagtgc ttaaacattg aactaatgag attttactgt tttgaacagc tggtcaagtt   1260
tggaggccc                                                          1269

<210> 494
<211> 858
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (848)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (849)
<223> n equals a,t,g, or c

<400> 494
gggacaattt actttgtttt gctaagttta catgtccaat cggtgacagg gccagaaaga    60
gaatctaggc ctgcttccca gcaacagtgt agatgtgaag gtaaggtgaa ccacctgtgt   120
cccttgaatt gcatgcttat ccattgtcta taaggcagct ttatctggca gtgaaattat   180
gtgtcatttc tggtgggtgg ctgggcctgc catagcaaat taccacaaac agaaatgtat   240
tctcttatat aattctggag gcaaagtctg aaatcaaagc atcagcaggg ccatgctctc   300
tctgaaggct ttagagaagt atccttcctt gcttcttcct agtttctggt ggttgccagc   360
aatccttggc attcctggac ttgcagatgc atcactgcaa tctctgcctt agtatccaca   420
tgaaattttt cctgtgtgtc tgtctgtgtc cagattgtct yctttttwatg ggggccattc   480
attggattag ggycttccct aatgcagtat ggcctcacct taatgtgatt acatctacaa   540
aaatactgtt tcaggccggg cctggtggct gaagcctgta atccmagcgc tttgggaggc   600
tgagacgggc ggatcacgag atcaagagat cgagaccatc ctggtcaaca tggtgaaacc   660
ccgtctctag taaacataca aaaatcagct gggcgtggtg cacatgcct gtagtctcag   720
ctacttggga ggctgaggca tgagaatcgc ttgaacccgg gggcagaggt tgcagtgagc   780
cgagatcgca ccattgctct ctagcctggc gacagagcaa gactgcgtct caaaaaaaaa   840
aaaaaaanna aaaactcg                                                 858

<210> 495
<211> 1107
<212> DNA
<213> Homo sapiens

<400> 495
gcacggagtc acccacatac aaagcagctt gggacagcac ctcggctgcc ccaccagaga    60
```

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actctctcag gattaccatg acccaagagc gccaagccct ggcatggctc ttctctacac    120
ttaaggcaga acggccttga ataaggtctc tctcagcctc ggtttaccca cgaagacacc    180
taagccccag gcttgctgag cagatgacgc gatggaaagc atgtgaacct gaaggagccg    240
cgccgtaccg gcttctcgga ggccctggcc tgtgctgcct ctcagtcctg gaggtcgccc    300
gcccactcct acctccatgg ggttgacggt gatggtcagg gcagagtcgt cccagtccat    360
ctcgttctcc ttcccggtgt cctgatcccg catggtccgc cgatgtgcgg cccggatccg    420
aaatacccc aggataatca tgaacaccag gaagctgacg cacaccacga tcacaactgt     480
cgcagtgctg gggacgactg tggragaatg aggggcggg atgcgaggtc actcggccca     540
gaaggccact gtgcccttga cctcctcggc tgtgcctggt caaaacgggc tggacagcac    600
gcttcagctg aacccacagg ccaggaggaa ataccaggaa aagctcgcca tgggcctcca    660
acctggctcg gccacgtcct gctccatagc tgcgggtgac atcatctgcc ctcttcgagg    720
gctttagttt ccttgtgtgt gatggggaat aattgggaca gggaaagacc ggcggtcatg    780
ctgagcagga ggctgtgccc acggtggggt gggggcaggg cggacggcat ggagcatctc    840
cgcttggtct ccctccccat gtcctacctg cgaacgggtg ggggttggcc aggttgtggc    900
ctgacaggtc aacaaaggag cggtgttccg ggtgcacgaa ctgtggctgg gcagccatgt    960
ggttggcgtg ttccatgggg ttggccgtgt ggattacatt cacctatagc agagaaagag   1020
aggatcgctg gagacaggca tcctgagcct gtccaagagg tgacagtgga gtcccgctgc   1080
tggcatgacc agtgccactc agagtgg                                       1107
```

<210> 496
<211> 1114
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (850)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (866)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1076)
<223> n equals a,t,g, or c

<400> 496
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gcggacgcgt gggcggacgc gtgggcggac gcgtggctaa acatcatcct gatttgatct    60
tttgccgcaa gcaggctggt gttgccatcg gaagactgtg tgaaaaatgt gatggcaagt   120
gtgtgatttg tgactcctat gtgcgtccct gcactctggt gcgcatatgt gatgagtgta   180
actatggatc ttaccagggg cgctgtgtga tctgtggagg acctggggtc tctgatgcct   240
attattgtaa ggagtgcacc atccaggaga aggacagaga tggctgccca aagattgtca   300
atctggggag ctctaagaca gacctcttct atgaacgcaa aaaatacggc ttcaagaaga   360
ggtgattggt gggtggcccc ttcctccccc caacatcagt ctgctgcagc tgccagaaaa   420
catgcctact actaccagca gaaagggagc agagcccaga gcatcaccag gagtgcctgc   480
tagtgtactg gcagcttgcc accccctcct ctcccttcac ccagacacgt ggtagggatg   540
gaaaaggatt cttcacagag cactctggca caccatatcg gagaaaactt gatagattag   600
ttaatggttt ttcttgaatt cgagaagcat agatctgttc tccatattgg tatgttctcc   660
ctcaaccaag atcttctaaa aagaaataat attttagtct tctgcttgag gaactgactg   720
tgaagcgacg cccagtgaaa aacatgttct tgcagcagct ctggtggcag ctgtccttga   780
ggaacctttg gtgtgtggtg ggaagctatc agaacaagaa atgtaggcat ttcccgtttt   840
tttgggggn grgggtgggg gggcangctc tgccctcttg aaaggcattt acttgtttaa   900
cacttgtcca gctacagtgg ggtacagtag ctggctattc acaggcatca tcatagccca   960
ctagtctcat attattttcc ttttgagaaa ttggaaactc tttctgttgc tattatatta  1020
ataaagttgg tgtttatttt ctggtaaaaa aaaaaaaaa aaaaaaaac tcgggngtac   1080
ttctagaagc ggccgagggc ccatcggttt tcca                               1114
```

<210> 497
```

<211> 371
<212> DNA
<213> Homo sapiens

<400> 497
attcggcacg agtgaaaatg gaaaagcaaa aaaaagttaa tctgtattgt gttgaagtac   60
agtttctgcc tccttccaaa ccaggttcaa atgcgtttcc cccctgtttg ttaatgtcct   120
gctcatccca cagcttgggg tcatcttaga cctttttactc tcccttttctc ccaactcctg   180
tcaggtgtag cccccatccc ctcctagttg tattgcttgg ttgtctccat ggcatgcttt   240
cttgcagtgg tgatgtgggt cttcctgcct gtggggtctt gcccactcta gttcatgtag   300
tttaagctgc aagaaaaaga tcttcctaag tgacagtctg agcctgtcac ttaaaaaaaa   360
aaaaaaaaaa a   371

<210> 498
<211> 360
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (25)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (29)
<223> n equals a,t,g, or c

<400> 498
gacagtcgac atggtgggtc caannattng gcagagtgcc atyccagcaa ttgggcactg   60
ggatcatttg caaggtcttc agggaagttt gcctttgcac agtttaggaa agattctgtt   120
aattaggtga atggtataat tgatacgaca agaggattgt ttaacttaag ggaagcaatt   180
tattatgcat gcatgagaag cttctaggta tttactgacc aattgcatgc ccattacata   240
tcctttttgt attttagaga taataatcat cttatattgt ttacctccta gcccagtttt   300
tggcacactt gaaagtacta caaattgtct ttatgaaaaa aaaaaaaaaa aaaactcgag   360

<210> 499
<211> 505
<212> DNA
<213> Homo sapiens

<400> 499
cggcacgagc tgacacatgg gacaaatgtg tcggagctgg ccactctcta cagggagaaa   60
cgcagctcgg tttctcccca gcttccagaa cacccggcag cgcctgctct gccatcttca   120
ttacctcaac ctccagaaac tggggtgccc agggcccaaa cccaacgtgt ctttcctctc   180
attgatcgca ttcagtctca tggctttaaa cacaatatca caccaaattt acctcccgcc   240
tgggcctctg ccctgtcctt gggcctcctg cattttactg cccacctgca cctatgtttg   300
gacataaaag aaactcccag cgccacctgt aatgcggcac tccgtagatc ctccaagtcg   360
gctctgtcta ctgcaactct gcccatctca gctgagggca gtgccactgt ccagtggtca   420
aaagccctgg agtgcccctg actcctgtct ttctctcaca ccctgtgtct gactcactgg   480
caaattatat tggctctacc tcgag   505

<210> 500
<211> 499
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (488)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (498)
<223> n equals a,t,g, or c

<400> 500
aaaaaaaaaa aattngtgnc antaactaaa ccacctctct ctgttctctt ctgggggggtg   60
gggtgggtgt gtgtgtgggg gtgggtaggg atggggaacc caagccccag taggagttgg   120
ggctgagatc aggaggaggg gaaggatatg agttttccat ccatctccct ggagaaggcc   180
atgacgggct ctccaagccc tggggagatc tggcgaggga ctagccaagt cagggtgacc   240
tcttgacctg actagttttt ctaacccaca tgaacaccag ggtgcctctc tcttcctcta   300
gcccagggta gggggacctg agtgagagag agagtgagac agacagcaag attgagacac   360
gcgggccccc actggtctct gagtgggaaa ggcaagtgcg agagataaag gcctccaaaa   420
aaaaaaawaa aaacttsgrg rgtayttcta agagcgggcc gcgagcccat cgattttcca   480
cccgggtngg gttaccana   499

<210> 501
<211> 1545
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (556)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (593)
<223> n equals a,t,g, or c

<400> 501
ggcacgagct aactccagca cctacatggt atgcctagtt tatggcaggt gttcaataat   60
taaaatgatt atcttgaata caataaaagt cctaatcctt tttgtttttg tttttatgat   120
gtgtgataat attcttggta ttactcaaaa agagttgtac tttttttaaaa aattcacttt   180
ttaagttagt ataaagaata ttcagtccag tttagaaatg aacagtagaa aagtaagaaa   240
gagctagcac ttgtggaatg gggtcactct gttctggggt gccccagaga atcccatgga   300
atgcctttcc caacctcctt aatggaggta gcttctgtta taaccccatt ttacaataag   360
aaaactaagc aacagaagtt gaacagtgta tccaaggtca gaatgaataa ttgagccagt   420
atttgaatcc aaactgtctg gccccagagc tagtgttcca tatatctttt attttctgt   480

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,aactttacgc ttggagaata gttgtaagaa tagtaacgtg atgtctcata tgttctttcc    540
tccatttcac tatatntata ttttggctca cttgctttat cactctatgg gtnttttgtt    600
gttgttgttg ttgttagttt tttccttgaa ccatgtgaaa acaagttaca gacatggtgc    660
tgcttataaa catttcagtg tgtgtataag accaaagata tcatcttatg tgatcagagt    720
ataattatca aaatcaggaa atctaatact gaagaaatgc tcttatccgc agtctaaatt    780
atttcatacc agtaatgttc cgtatcgctg ttgcttcctg atctttccct tccccagcct    840
ccagtccaga attcatcctg catcacacag tgcatccagt tgtcaggccc atcttggcga    900
gacggggtct ccctctgtcg ccaggctgga gttcagaagt tctgcttctg tggtccaggc    960
tctacctcct ggctccagcg gtcctcccaa ctcaacctcc tcaataactg gccccacggg   1020
tacgtgactc cacacctggc taattttttga atttttttgt agagacaggg tcttgctatg   1080
ttacacaggc tggcaggccc atcttcttaa ctgagagacc agtttatgct ttcctctagg   1140
gccatcatat acaaagtcca gaaatttagt gtgtgtaaag gtagctttta agtcaagcaa   1200
taagatgaaa ttgtcagtaa atgttactgg gatcggccgg gcgcggtggc ttatgcctgt   1260
aatcacaaca ctttgggagg ccagtgtgcg cagatcacct gaggtcagga atttgagacc   1320
agcctagcca acatggtgaa accctgactc tactaaaaaa aaaaaaatac aaaaattagc   1380
tgggcttggt agcaggcgcc tgtaatccca gctacgcggg aggctgaagc aggagaatcg   1440
cttgaacccg gaggcagagg ttgcagtgag ccaagatcgt gccattgcac tccagcttgg   1500
gggagaagag cgagactttg tctcaaaaaa aaaaaaaaaa aaaaa             1545


<210> 502
<211> 552
<212> DNA
<213> Homo sapiens


<400> 502
ggcacgagat attacatgga gtccggaccc aggaagaagc tgtttgaata ccagcaggct     60
cagctggagg ctgagatcga aaacctctca tggaaagtgg agcgtgcaga cagctatgac    120
agaggggact tggagaacca gatgcatata gcggagcagc ggaggagaac cctgctgaaa    180
gatttccatg acacctaagt tgggatgtgg atgtgccggg gtgaggaaga tgtggctgca    240
aggtctcccg gctgccatac tgcatgctgc aggctctgcc tttcatgacc ccaggcaaca    300
gccagggccc cactcctgag agacactggc aacacctctt agttgatttc tgttttcttc    360
tcttttcact ttttgtttct accagggtag aggccatgtt gaactggcct cttttcagga    420
cttttatttc cccctggatg gttgttggga gggagggaaa gtgtttctg aatggctatt    480
aatagtatta gatcattaca acttatgtaa ctttcaaagg ttgtacaatt atacaaaaaa    540
aaaaaaaaaa aa                                                       552


<210> 503
<211> 600
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (588)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (599)
<223> n equals a,t,g, or c


<400> 503
ttaaatagag aatatagccc aaaccttaat gtgctggaag ataattactt agaatatccg     60
acagctttgc aggaggcctg tattacttta aaaggtataa atgataggtt gtgtaatacc    120
ctacattctt atcttgaact atattatcgg gggctctttc tgttttacct taatgtgccc    180
aggggactcc tgcttagctt aataggacac ccaaaaggag gaaatgcaga gttaatggtt    240
taacaaattc taaactttat tagcaatttg catttaggag aagggcagat ggtgtgtggt    300
cgaaagctca tgggactgtg aattggtaga cttttttaa aatccagctt ttgcccctaa    360
cttttggtct cggagacctc tgtyctttaa taactagaac tgtaggccgg gcgtggcggc    420
tcatgcctgt raatcccagc actttggtag ggtgaggcgg gcggatcaca aggtcaggag    480
ttcgagacca gcctggccca gcatagtgga accctgtctc tagtaaaatt acaaaawtta    540
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300

```
gccaggcatg gtgacgtgcg cctgtagtct cagctacttg ttaagggntg ggggcaggng    600

<210> 504
<211> 522
<212> DNA
<213> Homo sapiens

<400> 504
ggcacagtgg agatcccagg ccagagtaag gtacctgaac tcttcctcgc gcctccctgc     60
acatgtgctc ccccgcctct gtagaactga tgatggtcat cgtgtgtgtc attgtgcaaa    120
aagcattgtc cgtgccatcc cctctccaag ggacacttct taccccctatc cttcaaggcc    180
ttctgcaaat gccattctct ccaggaaagc ctttccgcat tctcagttgg atttgatctt    240
ctcttcgaac tcccaggccc ttttgttccc tttgaggaca gattgcattc tgcttttttaa    300
tctagctgtg ttttatcccc ctcagtggat ggaaggtgtc ttcagggcca gaactgtggg    360
ttcctcttcc ttctcatcag tagcatcgcc atagctcctg atttctgaac acccactaaa    420
caccaggcac tgggctaggt actttgtcac aaaatttcac tgaaacctcc cttacagcaa    480
ctcccaagag gtgggtggtg ccgtaaaaaa aaaaaaaaaa aa                        522

<210> 505
<211> 573
<212> DNA
<213> Homo sapiens

<400> 505
catcctgggg gctgtgtgtc atgctcacct gacccaggtg tgtgtcccgg tgtgaaatcg     60
aggaggggac tggaagccct tccctgcctt gaaacatgaa agctgatttt ctgagcagca    120
gatacggtca gtggcaaagc tgcatctgaa gggcggcctg ggaaagggcc ctgtgctggc    180
cccgggtccg ccccacagat ccacacagca ccacctccag aagggctggg cccgggggtcc    240
tgcaggcggc accttttggt agagtttgtt tccctggaaa atggggaaaa tgtttcaagc    300
caggtgaggg ggaagttaa cactgaaata tgtattgttt ttaaaaatca aatgcacacg    360
catggaagct gcttgtccat gcactggttt tgtcactggc gtcctggaat ccgaccgtgt    420
tggggtgcag gcgctgtcag actccggctg atcctggctc gagcacacac atctaagggc    480
caggctggtt ccgcatggtg atctccgtct tgtatgtctg aatgttggcc taaaataaag    540
attactgttg taaaataaaa aaaaaaaaa aaa                                    573

<210> 506
<211> 597
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (15)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (39)
<223> n equals a,t,g, or c

<400> 506
tggcccnttg ctggntgagg ggcacaccat tgccagggnt cagccttcgc acccaggcca     60
ggcagaagct gtgctctgaa gctaggacag ctggctgaga agtgggttca ggcgaagggt    120
gaagccatgt gtagcagttc ctgccagtgc agatctggag aggagctggc ccggaaggcg    180
tggttgtgaa agcgcccttc ttatgttagg aggccttggc aaaattggat ttcttcaaaa    240
atacatgtaa aggtctgttg ttgaattgta ctctgcccct ggaagcagat acagatggct    300
```

301

```
gcctgctgct cggctttgct tttgcttttc ccaccgtgtt ttcatctttg ttcacttgag    360
gctttcccca gctggtgtgt gcaggacagt tcatggtaat gttgccctct gaggccccgt    420
acaccagaag ggaggccctg gaaaatTttg tgcttccaac gtggccttca attcttgctt    480
ttttgcccct crgaagcatg gggctttTga gcacactTaa aaaaaaaaaa aaaaacggca    540
cgagagtact tctagagcgg ccgcgggccc atcgattTtc cacccgggTg gggtacc      597
```

<210> 507
<211> 594
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (15)
<223> n equals a,t,g, or c

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<400> 507
tggcccnttg ctggntgagg ggcacaccat tgccagggtc agcctcgcac ccaggccagg    60
cagaagctgt gctctgaagc taggacagct ggctgagaag tgggttcagg cgaagggtga    120
agccatgtgt agcagttcct gccagtgcag atctggagag gagctggccc ggaaggcgtg    180
gttgtgaaag cgcccttctt atgttaggag gccttggcaa aattggattt cttcaaaaat    240
acatgtaaag gtctgttgtt gaattgtact ctgcccctgg aagcagatac agatggctgc    300
ctgctgctcg gctttgcttt tgcttttccc accgtgtttt catctttgtt cacttgaggc    360
tttccccagc tggtgtgtgc aggacagttc atggtaatgt tgccctctga ggccccgtac    420
accagaaggg aggccctgga aaattttgtg cttccaacgt ggccttcaat tcttgctttt    480
ttgcccctcr gaagcatggg gcttttgagc acacttaaaa aaaaaaaaaa aaacggcacg    540
aggtacttyt agagcggccg cgggcccatc gattttccac ccgggtgggg tacc          594
```

<210> 508
<211> 1333
<212> DNA
<213> Homo sapiens

```
<400> 508
gctttttttcc aaagaaaaac cactgtggtc attttttattt ttttaattac cgaagaaaat    60
ttctgcatac ccaaccatga acaaagaaac acaaagttat ggtgagatgg aatgccagcc    120
attcacttaa gtcgttctta ggtcctcagg tgtttaagat ccttgtcctg gcaaaatggc    180
aaatgactac atatcatgga tctctgggat caccccacag tattttgaat ggtgactgtg    240
gtatccaaga atgccaaggg tgttaattaa acatctgatc tgttgctaca ctctgtccac    300
ctcttgttat acgagatgac tctgaggcct cccattttac tataaaactg tttattatca    360
gcttccttgc accccaagtt ccaagttctg cctgccatac tggatggcct cccggcaccc    420
acactcatgg gcttccctcc caggacatgc cccaccccag tgggcgtgtc acgtgccagg    480
tgtccacacc tcccagtgca tcttgttcc tcaatactag acccagttgg ctagaaggac    540
tgtcattacc aatagcacat ttagcactga aggtactgac tcatggaaat tgtttcaaat    600
acctctgctt gctctccagg gaaacagatc aagagaaaat ctttgaggta tgtttggatc    660
atcaaaccat ctcatatgag ccatgctaag gtctaactaa tccagcaaga ttataattga    720
ccacatgata gccatcaaat taggcttgag ttcaagcgta tgatccagtg gtacttctat    780
gtgctctaca gttcattgga ctccctgtgt aatcactgtg tagagtacct caaacccatt    840
ttatagaagc tggagtggca cgtgtttatt gttttaggtg attacagatt tttataatct    900
tttaggatgt atttttgact tattcagttc tgagtccttg gtcaggagta cgtggtcccg    960
ttttactagt tttcctatgg taaaatgcaa tgtacctatt tttttcattc catgaatatt    1020
ttaatgttta aacaatccac tctacactaa gcacataatg agcgttcagc ctctgacttg    1080
gcactgaggt tatgggcatg tgtggcacag atagtgggg agggcttgag catgaaactt    1140
cgtgaaataa gtgtgatctt tgggcaaggc aggtggctca cacctgtaat cccagcactt    1200
tgggaggcca aagccgtcac ttgagaccag gaatttgaga ccagcctggc caacatggtg    1260
aaatctgtct ctactaaaaa tacaaaagtt agctgggtgt ggtggcgcac atctgtaatc    1320
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ccagctactc gag

<210> 509
<211> 391
<212> DNA
<213> Homo sapiens

<400> 509
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ggcacgagtt agaggctttt tttgctaaag ctgagcttac atgccgtaaa actcagttcc    60
aaagtataca gttcagtggt tttttaatag cgatagggtt cataaaccag tgtttctcag   120
ccagaggtga ttttgccccc caaggggtat tatgcattgt caggagacca gaaagggttg   180
tcacaactcg ggggtgccac tagcatctag tgggtggagg ccaagggtgc tgcccaaatc   240
ctgcagcgta cgagatggct ccatgacaca gaatgacctg gctgcggtgt tgctgaggtg   300
gaggcgtcct ggtctaggct ggtgctccag ctgcttaca gcctgctgcc tcccaaccct   360
tcccgcaagc tgaaaaaaaa aaaaaaaaa a                                   391
```

<210> 510
<211> 182
<212> DNA
<213> Homo sapiens

<400> 510
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ggcacgaggt aagtctaact attctgactg tatttattag ctttactttt gttgatgaca    60
aatccaatct cagattgata tgtgtgcttt ttaggtataa tcatttgcat actgaacatc   120
aaatgtattc aggtattagc catctctttg aagattgtaa agagaaaaaa aaaaaaaaaa   180
aa                                                                  182
```

<210> 511
<211> 587
<212> DNA
<213> Homo sapiens

<400> 511
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ggcacgaggt ggcacgagga agcagtggaa taatcctcca tggcacaagg gagcggtgga    60
ataatcctct gtggcacgcg gggggggggtg tggaataatc ctccgtggca cgaggggtg   120
gtggaataat cctccgtggc acggggggtg gaataatcct ccgtggcatg aggggcggt   180
ggaataatcc tccgtggcac gaggggcag tggtataatc ctctgtggca cgagggtcg   240
gcggtataat cctccgtggc acgaggatgg tcaccgcatt cgtcactctt agctgcagtg   300
cgtgtgacag tcgccagggc tgctgtttga ggaatgggag ttgcctgcgt ctgctctgcc   360
ccaggtggtt tgtagggtgg tttttactcc ttgccaaagc ccacacagcc ccgcaaggca   420
aacagtgttc aactcttttc atggctgaaa aactgggaca tcagagaggt taagacactg   480
gccagggcca cctggcaggg aagcttccgg gccttgcctg caccaggact gtccgatggg   540
gacgtcatct gcctcccaga cggtatctta aaaaaaaaaa aaaaaaa                 587
```

<210> 512
<211> 1630
<212> DNA
<213> Homo sapiens

<400> 512
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actagtggat ccaaagaatt cggcacgagt ggggaggcct caggaaactt ataatttgtg    60
cctgcttccc cttcaccttc tgtcatgatt gtaagtttct aaagcctccc cagcccttcc   120
ttacagccaa tagaactgta agtaagtcaa acttcctttc tttcagtctc agatagttct   180
tcatagcaat gcaagaacag actaatacag tatcttcata agtgaagcat gtttcttgta   240
ggcaacagat tattcggtct tgtttctttt catccattca gtcactgtgt gtcttttgac   300
tgaatacttg agtccattta aatccaacgg aatttgagaa gtggttgcct actgggaatg   360
tggattgact gtaatgggac tgatataagg tgatgtaaaa attatccctt ttgataatga   420
ttttggctac aaagggctgt atatttagtt agacttatca actaatgaaa atcaaattta   480
tgattttact atttgcaagt attgcctaga tcaaaaaatt aaataaatta tgcaattttg   540
tttgactcct tgaggttcta tataaagcat ttttttcttg ctaatattcc tgttgggtca   600
aataattttt aaagttactt tttatcaacc tagaagtaaa tagtctcata aatatttatt   660
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tcattattat tgcttttatt atttgtaaaa tgtcaataat gaatgtgata gtttacaaat    720
aaagtttaca catctaagac tttacaattc aaatataaga gatactgaca ctaagaaatg    780
ccatgttgct aatgtgagca aacataagat tagtatacat ctgttttatt gcttctgtgt    840
cttttgtatt tctccctata ttttttttgta ttatatttgg aaaagacatt acaggaactc    900
ctatttaaag agctttataa aaaagttcac agatgactta agatatcaca tgctcctgaa    960
acctggggggc tttcttcgtg ggtagctatt caaagtctat ttcagtacat aaatgaaata   1020
tggattcaag ttgaggaagt ctttgtatta aatacactaa aagatagata ggaaatgcat   1080
tgtaacattt ggtcttgtat ttcttcagaa agtctatgtg tgtttatctg tatatttatc   1140
tacgttttaa tgtatacatg tatatatatt tagatatatg tgtgtctcac acacatatac   1200
atatacttat atacagtctg acactgtatt catgggttcc acatctgtag attcaaccaa   1260
ctttgtattg aaaatatttg gaaaaagggc agagcaagat ggtggaatag aagcatacat   1320
tgtttctctc ccctactgga acaccaaatc ttaattatct gcacacagaa aagcaccatc   1380
acaagaacca aaaatcaggt aaacaatcac agtacctatt tttaactgca tttctctgaa   1440
tgaggaattg aggagagcag gagagacagt ctggatggtg atgccacccc tcccccatcc   1500
ccccgcagtg acacggagag acaatctggg cattttgggg agggaggggtg cagtgactga   1560
aggactttat attgaactca gtcctgccct gtcacagctg aaaataaagc catactgatc   1620
tcggctgtca                                                          1630


<210> 513
<211> 2139
<212> DNA
<213> Homo sapiens

<400> 513
ctcgagtttt tttttttttt tttttttttt tttttttttt ttttggttca ggagtatatg     60
tgcaggtttg ttatataggt agactcgtgt catggggggtt tgttgtacag attatttcat    120
cacccaggta ctaagcctag tacccaatac ttatttttttc tgctccactc cctttttccca   180
tcctccaccc tcaagtagtc ctcagtcaga cctgaattct gattccagct tggccacgct    240
tagccacagg caagcccctg aacctctctg tgctttagtt tctttgctta taaacaccta    300
agccatgcgg ctgttgtgag gactatttga gttgtactta tctcgcccag cacagagcat    360
gtcctcaaca gacagtagct tcgggggctgg aaaacatgtc taacgtgtaa aggcaattca    420
gcagtcttgt tcatgcattt ttgtatgcaa gtttctaatc tgtgttacct ctgtgggcat    480
atacatcatg gggatttgta gcttcatttt ataagaagct aatattggtc atgcttacct    540
actattcttg ggtgtttgcc agagstgctt tggagtatat ttgaaatggc catctccytgc    600
agtattttcc atgcctacag attctgagtt ttccttgt ccttccgttt gctgtcagag       660
cattatttta gcttctaact ttgcagtttc taatcatatc tacgttttc caccacaagg      720
aaagaatgtt gagaatgaga gtgaaggaca gagataacaa gtaaggctat acctgcttag     780
ctgctggatt tccttcctc ttattttgat gtggcactgt ttgatttccc tgtttgcaaa      840
ttgcgtcttg cttcccattt tgccaaattt tgatcatttt cttctttcag aaaggaaaaa     900
aaaaacacaa acaaccaaat tttattttcc atatagttta attgaattga tggctgctgt     960
cacaaaataa aataaaaacc tcacaaacaa gaaggctgca aatcctagga ttaggctact    1020
tctgaagttt taaaaattct tcaaggcatt tatttgcaaa ttctacccat ttgcatattt    1080
tataagcata atacaaaaat gtattattta tcaggtggtc taggcatgct tgtggaaaat    1140
gaatggttgc aaattcaacc ttcattttaa aatcctcatt gtaaatccat ccctctaact    1200
tgcaggaaaa ctgggttttt caaccctagt ttttttctgat ctacttaaaa tactctagac   1260
tccacactgt gagcaacttt tattgagtat gtgtctgtaa tttgaagaga atggctgcca    1320
atacataaaa tcacaaaata cagaataatt tacaatgtca aaatcacctg atctcattgg    1380
ctccatttta tctggtcatc ccactgacat ccatgccaaa gatattcttg caagktttcg    1440
ggcagaagta tgatctcaca cttaggcaat ttcagttgtc aatgacgcaa tacttgggag    1500
tttcatgcct tgatatcttg tctaaccttt atgtacagtc aagagaagaa atctgatttg    1560
agctgttgct ggttcctgtt gagtttagac tccatgggcc agaaaatacm ataccccag     1620
atctgagaca attgatgagt gaataatcat tacagtagaa aacaaaatta aatgagcatg    1680
ccattctttg gctttttgcc attaaatgag catgccattg tttggcttgt attttatgat    1740
tcagtatcca ttttaaatat ccattttaa gtatccattt taagtgagac tttttaagtg     1800
aaatatttta aagtatccat attaagtaag tatgataact atattttaat atgattgctc    1860
tctttggtga aatgtaacta ataggcagaa aatgctgcaa gtggaggagg atttgctaaa    1920
gcatctatta aggcttcttt ttgtaaggta gttttcttca ggcacccaga agacacttttt   1980
gtccctgtag agccacatga tgttttctgg actataggaa gcaagacact ggtacaatga    2040
caaagtgctg gtcctctctc ctggctccct tccgcttgcc tgtcatatca catatctgac    2100
cactgatttg tatcctgtgg acacagcctg tactatggc                          2139
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<210> 514
<211> 819
<212> DNA
<213> Homo sapiens

<400> 514
ggcacgagaa agtatgctag tagtcattgt gttcttcact atcacacact cagagtaaaa   60
aaatacgttt cacttaatcc taaatgaaga agtaaaaatt actagttttc taagtcttta   120
ttccttaagg acacatctta attgcttgtg tgacaaaatg ggaggtatgc ctaaagcact   180
tctgcatact gaagtatggt ggtcgtccca aaatgaaaac atttgtgtgt gcttttgact   240
tgtgagcttg tttctgtttc tggacctacc ctgggcaggt ttccacagtt gagaatctta   300
gcgtattgct gttacctcaa atttccacac actaccagtt tgtctttga aatgttattt   360
ttataagatg tcaaccctgg tatggttcac ttttgttata tgttggcacc tctgtgggtt   420
acggaaagct ttgccctcca aagcaaccag ttggttttta ggaaagggaa atattgatct   480
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<210> 515
<211> 174
<212> DNA
<213> Homo sapiens

<400> 515
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ttttatgtat ggcagattaa cattttttct ctccttacca actctttact tatgctattt   120
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<210> 516
<211> 622
<212> DNA
<213> Homo sapiens

<400> 516
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tcactgctgt cagacgctgc tgccctggaa gktccccctg gagaaggtgt ggcatcacca   180
ggatggtcag gtgggcagtg ggttgagcgt gcagcctcgt acccagcctc ctgtgtcctg   240
gctggctgtt ccaggacttg cacctttca gcagttatct agacctggcc gcagtggcct   300
gagttgcagt gattcgtatt cactcattct ttgatgttct agatccacca ttcattcgtt   360
gcgttatttt tctgggatga tgaagctacc agggtttgt gcgtgttgtt tcagcatatg   420
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aggctgtctt ccatgctatc ttcatgagtg ggtggcagca cgtgcccaac gctgcccact   540
gggagaagca ttgatactgt ggccactcac tgcagagagg gtttttttg gcamagcaaa   600
aaaaaaaaaa aaaaaactcg ag   622

<210> 517
<211> 1993
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (365)
<223> n equals a,t,g, or c

<400> 517
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305

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gtgaaggtgc cgagcggcag gctggccgtc acgcccttca gattgttggc ggtggcgttg      180
tggacggtca gtttcttgcc attgcccttg cgccgggtgg tcggcaccgc gacctcccgc      240
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cggccagctt cagcgccgcc tcgaagcwmt ccgccaggcg cgtcgccatg tcgggccga      1560
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gcatgtaatc gtaaatctcg gtgacggtcg ccacggtcga gcgcgggttg cggctggtgg     1920
tcttctgctc gatgctgatc gccggggaca ggccctcgat atggtcgaca tcgggctttt     1980
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<210> 518
<211> 1094
<212> DNA
<213> Homo sapiens

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ggtcagctgt tcccctcgcc gagaaggcag cagctgaact ttccgcttac gctgcccaga      180
gctgccaggt gtagactgag aattcgagtt ttgtttcttc cttggggttg tatctgcagc      240
taaagaaaga aatcaagact cgtttgcttc cttccctctt ccagaaatgg atggttgtgt      300
ctacccactt cgcatttcac actgagtttt caatgatggt atctctgaaa agattcaatc      360
ttctatggtt tggttgcttg gatggtgttt gtaagattaa ggcgcgcaca caaaccgctt      420
actgtgcagt aattactggg atcacccaca ggtgactcaa actgagctta cctctatcca      480
atcgttagcc cccatctgta gcctttctcc ctcatcagac tataaacttc tgaaggagag      540
gaaatctctc tctttgtatc taacatgcct tagacatagc aatgctcaag accttttttc      600
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aagaactgga atgatgacac agctcttctt ctctgttggg aaaaaaggaa caatttagtc      780
tagaaagact tcttggctga agtattaaat aatttctcac accctcctaa ctaccaagtg      840
gccaacatct aaaacaacca tcatttaaga tctcagtatg ccaggataaa aaaagtcaac      900
aggaaattcc aacagaatga agggaggctg ttcacagagg ccatgaagac agtttttgtc      960
ttaaaacaag cacaaacaat aatcttcaaa ccttacttac aacctaccaa gtccctggga     1020
gttctagaca cagatgtgat ccctgaggga gtggcattcc agccaactgc aagcacctag     1080
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gggatcagct cgag
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<210> 519

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gttctcgctc agttagttca catgaaatct ggttgtttaa aagagtctgg gaccccccct   180
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gcttcctgta cagcctgcag aacggtgtag ccagttaaac ccccttcctt tataaattac   360
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ttgttctcna gatagcaatg agaaagcntt gaggttgtgg ttaagagcac aaactctgaa   480
caagacaact gaagttttga tcccagctct gccacttwct agttgtatga ccttggacaa   540
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cttgtaagcc tgctgaaaga atcatggaaa ggtctctggt tgtcaagaga aaggatagct  2400
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307

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<222> (64)
<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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cnttgattac gccaagctcg aaattaaccc tcactaaagg gaccaaaagc tgaagctcgc   180
gcgcctgcag gtcgacacta gtggatccaa agaattcggc acgagtaaga gtgttactga   240
gattttcagt gatttgggaa aacttgatgg atttaaagca gacatggtga atatgggatc   300
cgcgtggcct tttttatatg gatatttttc actgaaaatg gttttaatgt ttattcatat   360
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<210> 521
<211> 2295
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (646)

308

<400> 521

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gcaggagaga ctcagggttc ttgttgcatt gctgcagtag gagagacttg gggttctcgt     540
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gatacggaga caccaaagat gtaaaagtag agtttagttg tgtattggga gctgcaaata    2040
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gataattcac agaaaaaaaa aaaaaaaaag caaggaaatg gaacaaaaca gataaagaga    2160
agttggtaga tctggaggac agaggatgaa tatctaactg aagagtcgtg gatgctcctg    2220
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ttggaaagaa agtta                                                    2295
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<210> 522
<211> 1055
<212> DNA
<213> Homo sapiens

<400> 522

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ggtagtggtt ccccacccct gaagtctggt ggtttctctc ccagtgtggc tggktggggg     120
cttttatggg ctcagaacag gggcatgcat gctgaatggt ttgtgggcat gcaaagaaag     180
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agttgtcttt ggcttagagg tggggtttca ctggagaccc gccctgtga ggcatttgtc     420
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cctgttgatg tggttcttac agagccaaaa agtcagagca ggctgggcac agtggctcat    780
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<210> 523
<211> 1179
<212> DNA
<213> Homo sapiens

<400> 523
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<211> 883
<212> DNA
<213> Homo sapiens

<400> 524
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catatggtgg ctgtacagac agtgggttgc agcacagctg aagaactgac ctggcatctt    180
ttcagcaagc agtgaacaca cgagtccccc tactccaggg atgggcagtt gcatggcagt    240
catgctcagg tgccctgatc tacttagtgg cctatgtgaa tagttacagg acctgctcac    300
tgttacagga tgataagcct tgaagtttgg cacacttagc aaggactgac aggaacactc    360
agcacccatg gcagactacc tttcctaaca gagacataga gattctgcga ggtctaactc    420
acatatactt gtattccaag gatacaagtg gaggacagaa atgaggcaga agtgataagt    480
tgaagagcac ggccaagaat tttccaaaac aggtaaaaat catcaaacca cagttaaaca    540
agaagacttt tggaggctgg tgcagtggct cacacctgta atcccagcac tttgggaggc    600
tgaggagggc ggaacacgag gtcaggagat cgagaccata ccggctaaca tggtgaaacc    660
ccgtctctac taaaaataca aaaaattag ccgggcttgg tggcgggcgc ctgtagtccc    720
agctactcgg gaggctgagg cagaagaatg gtgtgaacca atgggagaag aatgggagaa    780
ccaatgacgg gaagaatggg aggcggagct tgcagtgagc cgaaatcgcg ccactgcact    840
cgagagtact tctagagcgc gcgggcccat cgattttcca ccc                    883
```

<210> 525
<211> 383
<212> DNA
<213> Homo sapiens
```
```

310

<400> 525

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ggcacgagtg gctgggagtc actgatgctg cctctgcctt ctgatgctgg actggccttg     60
cttctacaag tatgcttctc ccacagctgt ggctgcagga acttaattta taggaggag     120
cctgtggcag ctgctgcccc agccacagct gcactgactg tgctcaccac acatctgggg    180
cagccttccc tggcagggggc cctcgtggct tctcattttc cattcccttc actgtggcta   240
aggggtgggg tgaggggatg gagagggagg gctgcctacc atggtctggg gcttgaggaa    300
gatgagtttg ttgatttaaa taaagaattt gtcattttaa aaaaaaaaaa aaaaaaaaaa    360
aaaaaaaaaa aaaaaaaaaa aaa                                            383
```

<210> 526
<211> 657
<212> DNA
<213> Homo sapiens

<400> 526

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ggcacgagca gctgcaagtc tggcatggga agtctacaga agatgaacca aatagccaca     60
aagtctctga gctaattttg aaaggtgggg atttgggagt aagtggggac tgggagagct    120
ggtcagggtg aggaatggct gccagggggc tttgaatgca cttgtttgaa gtttgtatct    180
gtaccagcag ctgtggaatc tgcatgccat gaaccagttg gcaggtatag acaatgaacc    240
tggcattatg aatagcaagg ttgggagcag gtggggaaat tgggatttga gaggccagca    300
agcaggagtt tgcaatgttc tgaaggggttt tggtgattag aaaagaacag gtcagctggg    360
tgcagtggcg catgcctata atccctgcac tctggagggc caaggaggca ggttgcttga    420
gtccaggagc tcgagaccag cctgggcaac atggcgaaac ctccatctct actaaaaata    480
cattaaaata tatatattca ggagtggtgg tgcacacctg tagccccagc tactcaggag    540
gctgaggtga ggatcatctg agcccaggga gttgagactg cagtgagctt tgatggcccc    600
actgcattcc agcctgggca acaagagtga gaccctgtct caaaaaaaaa aaaaaaa      657
```

<210> 527
<211> 1901
<212> DNA
<213> Homo sapiens

<400> 527

```
tgttcggacg cgcaatagat ctcggtgcgg ttgcacgtgg agatgatcgc ggcctcgacc     60
tggggatggc ggccggtgcc gaaagaactg cgcaggctct gcagcgtggg ggcgatctgg    120
tcgagcgcga acgcaaaacg accgcgcaga tcgagcggcg cggtcgtgtg gttcaagcca    180
agagcccaga cagacatgcc cgtgattata aaatcagcaa ccgcaccggg cttgcgcagg    240
gacaaatggc tttccctatg acagccataa gccccgccgc atgacctccc gcacgcatgc    300
ggccccccat ggacctgctc gaccttctcg atcacctgct caatttcgtt gcacccgccg    360
ccttcatggc gctggtgctg gtgttcgcgg gccgcttcct gggcggcagg cgtgccggcg    420
tgccgcgctg gtgggcgcaa ctggcgctcg tgtttgcggc cggtgtcgct gtgctggtgg    480
ccggcctggc ggtgttcggc cacgacggga tgatggcgac ctacgccgcg ctcgtggtgg    540
tctgcggcac cgtgcaatgg ctggcaatgc gcggctggcg ccgctgaaag ccgctcaagc    600
cgggtccagc cggcggatca tgtagaccga ccggccgggg taggtggcga gccgggcctg    660
ttgctcggca ccctcgggtt gcgttgccgc atagccctgg cgctcccaga aaccgaccga    720
agactgcacc gacaccagcg tcgaaagccg ccatccggcc agcgccgcat gcgcccaggc    780
atggcgcacc agccgtgggc cgaggcccag ccctgcagag tcggggtgca ctgccaggtc    840
atgcaggtac agcgaatcgg cctgcggggc cacttcgaac tcgccgtgca gcggcgtcag    900
cttgccgacc accgacggat agcccgccag ataggcccgc acgccgccgc catgctcggc    960
gacccagccc gtatgggggcg cggccgcgag ccggcgggcg atcagctcgc cgtcttccac   1020
gaagcccgcg ccgtagcagg cgagctggat cgccagcacg gcgtcgaggt cggcggcgcg   1080
catgtcgcgc acgaagggggg cgttcgacac gatcaggcca gcagcagctt gtcgtcgtcc   1140
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cgctgggggc cggccacgtc gaggatcacc tggccctcgt gcagcattac cgtgcgcgaa   1260
ccgtagtcca gcgcctggcg catgctgtgc gtcaccatca tcgcggtcag ctggccggcc   1320
tcgacgatct tggccgtcag ctccagcacg aaggcggcgg tcttggggtc gagcgcggcg   1380
gtgtgctcgt cgagcagcag gatgcgcgag ggcttgagcg aggccatcag caggctcacc   1440
gcctgccgct ggccgcccga cagcaggccg atgcggtcgg ccagccggtt ctccagcccc   1500
agcttcagga tcgacagctt ctcgcggaac agctcgcgca ggttgcggtt cagcgcgaag   1560
ccgaaggccc gccgctcgcc gcgcttccat gccagcgcca tgttttcctc gatggtcagc   1620
gcctcgcagg tgccggccat cgggtcctgg aacacgcggg ccaccatgcc cgagcgctgc   1680
```

311

```
caggcgttca tgcgggtcac gtccttgccg tcgatctcga tgctgccctt gtcgacgatc   1740
aggtcgccgc tcaccgcatt gagaaaggtc gacttgcccg cgccgttcga gccgatcacg   1800
gtgacgaact ggccggtggg aatctccagg ctgagcccgc gcagcacgcg gttctcgatc   1860
ggcgtgcccg ggttgaaggt catctcgaga gtacttctag a                       1901
```

<210> 528
<211> 375
<212> DNA
<213> Homo sapiens

<400> 528
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attcggcacg agttaagtag taccatgtgg ctgtggaagt ttaacttgtc actaatccac    60
caaactctga aagacagca tattttccgt cattcccaaa agactatcac aggcaacatt     120
gaggaatgct ttgttaaact ccagggatat attccacatc acacttcccc cgtccaccag    180
attagcaact gtccaaggac aaaacaaaac acacactaaa aaggaaatgg ggttagtccg    240
atatgtctcc atctccttat gctggttctt ttgtctgcag aagccacggt ttcttttctt    300
ttttgaaaaa aaaaaaaaaa aaaaacycgg gggtctttyw grggggccsg gggcccacgg    360
tttttcccac ccggg                                                    375
```

<210> 529
<211> 375
<212> DNA
<213> Homo sapiens

<400> 529
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attcggcacg agttaagtag taccatgtgg ctgtggaagt ttaacttgtc actaatccac    60
caaactctga gaagacagca tattttccgt cattcccaaa agactatcac aggcaacatt    120
gaggaatgct ttgttaaact ccagggatat attccacatc acacttcccc cgtccaccag    180
attagcaact gtccaaggac aaaacaaaac acacactaaa aaggaaatgg ggttagtccg    240
atatgtctcc atctccttat gctggttctt ttgtctgcag aagccacggt ttctttttct    300
ttttgaaaaa aaaaaaaaaa aaaaacycgg gggtctttyw grggggccsg gggcccacgg    360
tttttcccac ccggg                                                    375
```

<210> 530
<211> 303
<212> DNA
<213> Homo sapiens

<400> 530
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ggcacgagat tggatggcct agcatatgat ctatatggag ttaaggaacc aaatgggtga    60
ttctaagata caaagaatga aagataaatt aattatgttt ttaatcttct atcagtgtaa    120
tacattgcct taattgtaaa gcagcagaat gaatcaatgt aggtgcattc aatttttctt    180
ttggaaatgg aaattacatt ttatcattgt catcctaaga gtaatacaag attttgagaa    240
aagttttggt aaaaacagaa aaatgttaga aaaatttaa aaagtaaaaa aaaaaaaaa      300
aaa                                                                  303
```

<210> 531
<211> 810
<212> DNA
<213> Homo sapiens

<400> 531
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ggcacgaggt ctcttgctgg cctggaccat acatcatcat ttctcatgta gattttgca     60
gcagcctctt aactggtctc ctatcactcc tacttaaagc cctctggtaa cttcttagca    120
gagtaaaatc cagagtcctt agagtgttct ctaagaccgc acttgatctg gtctctgtcc    180
acctaacctc tgacctcatc tttcatcact tgcccttct tcactcattc ccttccagca    240
tcagtcctca cttcctgaaa catgtcatgt actctttgct ttgggtctta tgttctgtag    300
tgctcttccc gcagatcact gtggtggaaa tgccttccca gaccaccta tatagactag     360
caagtcctga ccttggattc cctctctcca tccctcttac cctgcttcat ttttcttctt    420
agttctcccc actgcccccc gccgccccaa ggcagggtct gagtctgtca tccagcctgc    480
agtgcagcag tgcaatcacg gctcactgca gactcaacct cccaggctca agtgatcctt    540
```

312

```
ccacctcagc ctccagagta gtagctgaga ctacaggcac acgtcaccac gcctggccaa    600
catggtgaaa cccagtctct accaaaaata caaaaagtag ctgggcgtca tcgtgcacac    660
ctgtaatccc agctacttgg gaagctgagg cacaagaatc gcttgaacct gggaggcaga    720
ggttgcagtg agccgagatc atgccactgc tctccagcct gggcaacaga gcaagactcc    780
atcacaaaaa aaaaaaaaa aaaactcgag                                      810
```

<210> 532
<211> 1256
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1238)
<223> n equals a,t,g, or c

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<400> 532
gaattcggca cgagccaggg cayactttcc caggctctct ttccagaatt tgtctgcact     60
ggcaaagtct ttctcaccta aatcaaagca agagaatagc aggccttggc tttggggatg    120
agatgtgagg gacaatagga aactgtgata cctgaggcca aagcctgcct gagcctctgt    180
acctgtgtca tgaaatccct gctccctggg tttggatatt gtcagtcttc accagcctct    240
ttcctttatc cctttctctc cttcccatct ctcccacgca gcagctaaga atataaacca    300
tgggggatta aaaatagcaa ggctggagag tgttatttct gaagcattta gcaaaagcct    360
ccccttctgt gtgcccacag tttagtaaaa tccccaaggg caaaggagga gtgtatgttt    420
tctctctctc tctttctctc tttctttctt gttggataca gcctgggcaa aggagtgaga    480
cctgtctctt aaagaaagag agscgggcac agtggctcat gcctgtggtc ccagcacttt    540
gggaggctga ggcgggcgga tcacctgagg tcgggagttc gagaccaacc tggctagcat    600
ggtgaggccc catctctact aaaagtgyag agattagctg sgcgtgatgg catgtgcctg    660
tggtcccggc tgcttgggar gctgaggcag garaatctct tgaacccggg argtggargt    720
tgcggtgagc cgggatcgcg ccactgcact ccagcttagg caatagagca agactctatc    780
mcaaaaaaaa aaaagagaga gagagagata aagaggtata ttgggmcaat tagtcatctt    840
tcctacattt tctcttttt tcagagccca gaatccttgc atacattttc tcattctaaa    900
atcctaccta tttagtttgt agaaatgatt tatgtagtaa tcatagactg ctaaaagcta    960
gaactccggc ctcctttac agacagttac taaggcttag aaacatcctt cagcttttca   1020
gaggttgcaa catacaactg gtctttttcc ccagcccagt tctctttcac tgatagggcc   1080
gttcatcttt tcctattcct taaacccct ttcaagtgtt aagatttaac ctcttgttct   1140
agtattctag tatttgaaga acaaatttat ttcctgttac acacttcata tacatttaaa   1200
aaaaaaaaaa aaaactcga gagtacttct agagcggncg cgggcccatc gatttt        1256
```

<210> 533
<211> 657
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (19)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE

313

<222> (98)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (143)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (176)
<223> n equals a,t,g, or c

<400> 533

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catcaatgng cgtggatanc gntttgactc acggggattt ccaagtctcc accccattga      60
cgtcaatggg agtttgtttt ggcaccaaaa tcaacggnac tttccaaaat gtcgtaacaa     120
ctccgcccca ttgacgcaaa tgngcggtag gcgtgtacgg tgggaggtct atatangcag     180
agctggttta gtgaaccgtc agatccgcta gccgcaatta ctgtgagtta gctcactcat     240
taggcacccc aggctttaca ctttatactt ccggctcgta tattgtgtgg aattgtgagc    .300
ggataacaat ttcacacagg aaacagctat gaccttgatt acgccaagct cgaaattaac     360
cctcactaaa gggaacaaaa gctggagctc gcgcgcctgc aggtcgacac tagtggatcc     420
aaagaattcg gcacgagaaa taacttgaag taacttttaa gtgtgtgaaa agaatatttt     480
tttccaccct gtccatttaa gcatctgtga caggcagtat taagtgatgg gtgtctttac     540
gtacacatgc ctgttgctca cagtactggg gaagagttgc aaaatagtca cccattctgc     600
agtgatttct ctcttcttat ttgtgaaaga ctcaaaaaaa aaaaaaaaa actcgag        657
```

<210> 534
<211> 626
<212> DNA
<213> Homo sapiens

<400> 534

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gctcccttac cccccagaaa ccctaatgtt agtgttcggc cacctcttct tccttctgaa      60
tctggagcct agcaggcctg cagtttagt cctgctcaca gttttgtgtc tctattccat     120
tgagattgtt gtaacttatt taagcatgac tatttcttct cagtttctct tttttatatt     180
ttattttcat ttgtatgttt ttgaagggag agggaagatc aaagtgtgtg cccactatac     240
aatcttggtt ttcccaaaat ccgtcccatg atgttataaa catatgaact aggagatgaa     300
actcaaggtt ttctttctaa cctaggaaga agttcagtct ctctctataa atagagaagg     360
gctgttgaat aatttgtcac ctgacttctc ttttgacttt gtaagaccag atagtctata     420
gacagaaaca gattcattaa accagggcca ttcaggttta tttagtaaaa tatttgtgtt     480
atgtttaaaa gctttggccg ggtacggtgg ctcatgcctg taatcctagc actttgggag     540
gccgaggcgg gcggatcacg aggtcaggag attgagacta tcctggctaa catggtgaaa     600
cctagtcact actaaaaaaa aaaaaa                                          626
```

<210> 535
<211> 342
<212> DNA
<213> Homo sapiens

<400> 535

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actagtggat ccaaagaatt cggcacgagt taagtagtac catgtggctg tggaagttta      60
acttgtcact aatccaccaa actctgagaa gacagcatat tttccgtcat tcccaaaaga     120
ctatcacagg caacattgag gaatgctttg ttaaactcca gggatatatt ccacatcaca     180
cttcccccgt ccaccagatt agcaactgtc caaggacaaa acaaaacaca cactaaaaag     240
gaaatggggt tagtccgata tgtctccatc tccttatgct ggttcttttg tctgcagaag     300
ccacggtttc tttttctttt tgaaaaaaaa aaaaaaaaaa aa                        342
```

<210> 536
<211> 808
<212> DNA
<213> Homo sapiens

314

<400> 536

```
tcgacccacg cgtccgccca cgcgtccgac catttcttct ccaaggaaca taaatagaag    60
atgtgcagac cggcaggggc tagtggcagg gggctggctg tgcattggtt ttgatgcctc   120
tcagctttgg cagccccaag gctggggccc aaaaaaaaac gagggctgat gaggtgacct   180
ggagtgaggg cggtgcttcg ccacccctca ggaaccatac ttcagcggct ctgcctctgc   240
acattgctca ccaacacaca gggtagaaaa ccactagctc ttcctggaga gaacagaaca   300
tgcagcctcc accacgtccc cagaaacagc cgcagacttg agctcactac atcaagaaca   360
ccacaccgcg ctccaaggaa cagctacaag cacagagaca gaggcataca gagacaaaga   420
gagaaagaga cgcaacatgg cagcagacac tgcttttttt attaaacatt aaaaaaaagg   480
tcaaaatcca agcaaacttg aacccgagaa tgtacacaga agtaggaaac acagagaaca   540
gagctgtccc agccagccag cgagcgatgc tcttttcgga gaacgtttca tagacggaag   600
tagattccat gggcctccaa dacaatagga tcctctctcc attcctcgcc atatgggttt   660
tgttttttaa gtcatttggt ttggggaggg ccttgttttt tttctgtttt gatattttta   720
tttttctgc agtcaccggc tgccaacata atctgcacca actggagatc agaaaccaaa   780
aaaaaaaaaa aaaaattta accacaac                                       808
```

<210> 537
<211> 1300
<212> DNA
<213> Homo sapiens

<400> 537

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ttggaatgca aagagaaaga agccagatgg gaaggctggg tagggagcta cgcacagcct    60
atttgctctt catccttaga ctttcttaca cgtccgcagg cctgtcactt cgggggacca   120
tcagctctgt ctcccagccc cagtgacctg ctgtctggca attaggaggt gtactttcca   180
agaattctgg atttccctga gtctatagct tcagtcctcc tttacctgct gatacagttt   240
atatgtttgt cccctccaaa tctcatgttg aaatgtgatc cctgatgttg gaggcggggc   300
ctgatgggag gtgtttgggt cacgggggca gatgcctccc tcccacggta atgagtgagt   360
tctcgctcta ttagttcaca taagagctgg ttgtttaagg gaaactgaca cctcctcttt   420
tatctctctt gctccctctc ctgtcatgtg acatgcctgt tccccccctt ccccttctgc   480
catgagtggt agaaggttcc tgaggcctca ccagaagcaa gtgctggtgc catgcttttt   540
tttttgaagt agggtctcac tcactctatc acccaggctg gagtgcaatg gcaccatct   600
cagcctcctg ggttcaagta attctcctgc ctaagcctcc tgagtagctg ggattacaag   660
tgcctgccac cacgccaggc taatttttgt attttgagta gtgatagggc ttcaccatgt   720
tggccaggct ggtcttgagc tcctgacctc aagtgatcca cttgcctcag cctctcaaag   780
tgctgggatt acaggcgtga gccagtgcac ccagccctgg caccatgctt cttatactct   840
ttgctgaacc atgagctaaa taaacctttt ttctgcctaa attacccagc ctcaggtatg   900
acttgacagc cacgccaagc agactaacac acctgctcac agttttgcc agctctgctc   960
ctatctgggc atgattctgg agctgaacac agccaggagc tccaggtcca cctgcattag  1020
cctccctcaa agcacaaaca tctgtgaaag cagaggctcg agagtacttc tagagcggcc  1080
gcgggcccat cgattttcca cccgggtggg gtaccaggta agtgtaccca attcgcccta  1140
tagtgagtcg tattacaatt cactggccgt cgttttacaa cgtcgtgact gggaaaaccc  1200
tggcgttacc caacttaatc gccttgcagc acatcccct ttcgccagct ggcgtaatag  1260
cgaagaggcc cgcaccgatc gccttccaac agttgcgcag                        1300
```

<210> 538
<211> 2092
<212> DNA
<213> Homo sapiens

<400> 538

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ggcacgagtc tacacaaggc agaagaggca cgggtttᵗcc tgggagcgaa tatcaagtgc    60
ctgagagcaa ctacaggact aactgtgttt gggttgggtg tagtataaat aataataatg   120
gctaatattt cctgagcatc tactaaatgc aaggaattgt gcttggtgtg tcatgtggat   180
tctctcttgc atcttcatga taaatgttat tgtcgctgtt ttaccgatga gggttggatt   240
agaggggtta aacaacttgt cttaggctcc acagctggga acaagtgggg ctgggaagct   300
gacttcgtgc tcttcaccac cacaaaggat gtgtgtgcat cctggggcat gcctgcctca   360
tgtgggggtg tcctgggctg aatttcctgg gcacttctca gtggaactct ctagcctcct   420
ggttcggaat gtcaactatg agatcccctc actgaagaag cagattgcca agtgccagca   480
gctgcagcaa gaatacagcc gcaaggagga ggagtgccag gcagggctg ccgagatgcg   540
```

315

```
ggagcagttc taccactcct gcaagcagta tggcatcacg ggcgaaaatg tccgaggaga   600
actgctggcc ctggtgaagg acctgccgag tcagctggct gagattgggg cagcggctca   660
gcagtccctg ggggaagcca ttgacgtgta ccaggcgtct gtggggtttg tgtgtgagag   720
gtagagaggc ctcagcttct cctggtgggg gtgctttgcc tgtgttcccc agctcatgac   780
ccttctccag ttgtcttgtt cccatataac atttgaactc tttacacacc tgaacctgtg   840
ggggccttgc ccatttgacc atgtggccca ggccaaagcc cagtgttggc cttacgcatg   900
gtcggcagga gagtcagttg tgtgctctgt tgaagcccca cagagcaggt gttgccaatg   960
ctgcggttcg tgcagaagcg gggaaactca acggtgtacg agtggaggac agggacagag  1020
ccctctgtgg tggaacgacc ccacctcgag gagcttcctg agcaggtggc agaagatgcg  1080
attgactggg gcgactttgg ggtagaggca gtgtctgagg ggactgactc tggcatctct  1140
gccgaggctg ctggaatcga ctggggcatc ttcccggaat cagattcaaa ggatcctgga  1200
ggtgatggga tagactgggg agacgatgct gttgctttgc agatcacagt gctggaagca  1260
ggaacccagg ctccagaagg tgttgccagg ggcccagatg ccctgacact gcttgaatac  1320
actgagaccc ggaatcagtt ccttgatgag ctcatggagc ttgagatctt cttagcccag  1380
agagcagtgg agttgagtga ggaggcagat gtcctgtctg tgagccagtt ccagctggct  1440
ccagccatcc tgcagggcca gaccaaagag aagatggtta ccatggtgtc agtgctggag  1500
gatctgattg gcaagcttac cagtcttcag ctgcaacacc tgtttatgat cctggcctca  1560
ccaaggtatg tggaccgagt gactgaattc ctccagcaaa agctgaagca gtcccagctg  1620
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ctgtggtgat tggccctgtg gtctaccagg cgaaaaccac agattctcct tctagttagt  2040
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<210> 539
<211> 643
<212> DNA
<213> Homo sapiens

<400> 539
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ttcaggagaa aactcaaaga accagaaaaa aagtggtggc ttaaaaagta gtgacaaaac  240
tgaaccttct cctggagaag ccatccttcc acaaaaaccc agtccaaacg tgggagtcac  300
tcttgagggg ccagctgacc cacaggcgga cgttcccagg agttctgttc tgtgctaaaa  360
tggggttgtg gttaagtgaa cgagaactct gcctacctaa gaagttcatt gtgttctaag  420
tggaaggaga gttactgaag ggaatgtgaa tttttaccgt ttgtacttaa gatacatttg  480
ttgtctaaaa tggctctgga taacattttt gggttaaaaa atgtaattta aagccaccat  540
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aatggattaa actgacaaaa aaaaaaaaaa aaaaaaaaaa aaa                     643
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<210> 540
<211> 1896
<212> DNA
<213> Homo sapiens

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gcaatttctt ttacaactac atgatgggca tcgagtttaa ccctcggatc gggaagtggt  180
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ccaccccgca cgccgtgggc gtcctgctgc tgggcctggt gggctactac atcttccggg  540
tggccaacca ccagaaggac ctgttccgcc gcacggatgg gcgctgcctc atctggggca  600
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<210> 541
<211> 3362
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1488)
<223> n equals a,t,g, or c

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acttttctta accattctca atatcgcaac tacatccact ttgtgcaaac atcaggtttg    180
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ttttgtgacg gagtgtaggg actggattgt gcagagaccc tctttgcatc tgtctgggcc    780
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ggtttattgt tgataacctc aaacatatgt gaatcatcca ctccaaacta gggcaagttt   1560
tcttctcagg ccctccaagg gagttcggtg acatccggca cattgtgggg atgaataggc   1620
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317

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cagcaggctg agaatgtcat agcctactcc atacatgggc actgctttgc agactgaaac  3180
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caggagcctg gaattaaata ccctcggatc cagttctcta ctgttaatgt tatcagcttc  3300
atcaagtact tcctctttga gtgatatctg tggagaaata aataaatcaa gctccctagt  3360
tc                                                                 3362

<210> 542
<211> 842
<212> DNA
<213> Homo sapiens

<400> 542
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gctcaggttt ccctgctgtt ggctttctgt tttggtttat taagacttgt gtattttctt   120
tctttgcttc ctgtcacccc aggggctcct gagtataggc ttttcagtcc ctgggcagtg   180
tccttgagtt gttttttgac actcttacct gggcttctct gtgtgcattt gcgtctggcc   240
tggagtaagc aggtccgacc cctccttctt tacagcttag tgttattctg gcatttggtt   300
aagctggctt aatctgttta atgttatcag tacattttaa ataggggcat tgaaatttac   360
tcccaccacc agggcttttt tggggggatgc ctgggccttt aaaacactag ccaaactcta   420
attaattctc aaatcactgc caggagttct tgctcctggc tgcaggccca ggccccaagg   480
tctccttctt ggggtcacaa acagcagtaa ggaagaggaa tatatagcaa ctcagggcct   540
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ctagctgcct ccccaccagg ttccgagtag tgtctgagac tctgctctgc agggcctagg   660
gtagcgctgg gagtgtagaa gtggcctgcc cttaactgtt ttcactaaac agcttttct    720
aaggggagag caaggggagg agatctagat tgggtgaggg gacggggat gtcagggagg    780
caagtgtgtt gtgttactgt gtcaataaac tgatttaaag ttgaaaaaaa aaaaaaaaaaa  840
aa                                                                  842

<210> 543
<211> 419
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (419)
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318

<223> n equals a,t,g, or c

<400> 543
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gctggacatg ctgttcttcc ccttcacaga ctacttcctt tcagtcacct tttcagtttc      180
ttctccatcc cccacccatg gcctccaact ctgcagccct ctgctctcct ctctctgtct      240
tgtctccaga gttccatctt ctcacccgac ctggaccatt actcccattc ccacaggcac      300
tgcagctttt tttcagaact gaaagtttaa attcccctt tatccttctc cttcttcacc      360
tacaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaan       .419
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<210> 544
<211> 1262
<212> DNA
<213> Homo sapiens

<400> 544
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cttttgggtt ggtttgttaa tttatacaaa gagattacca ccaccacccc ctccttcaga      120
cggcggagtt atattctggg ttttgtaaaa ctttatgtat ctgagcattt ccatttttt      180
ttttgggttt tgtattattt cttgtaaatg cattgtgaaa aattttattt tcggcgttgc      240
aatgcgggga ggagaagtca gattatgtac atagttttct aaaaagcctt tcttctaaaa      300
acgaaaaaag acccccacc caaaatgttt cgagtcaaca aatttaagag acagagccca      360
ttttctccat aaatttgtaa catgctattt ttatgtgcat gttttatgag ttcaaaatgc      420
aatgaggaaa tctgacaggg gaaattatct gtatgaacta aaagtaaggg aaccccgggg      480
aatgggagga caggattttt caaggaacct ttttcaatga aagagaagga agttaaaacc      540
tataggttat tttgtagagc tgagtgttaa tacgggccga gaaataaaag tatcttctgc      600
tccggctgtt tcactgcgga cggctggggc tgctgcgcgt taccttgctg caagcggggc      660
gccttccacc tggctggggg tctgcgccac agtttggtcc agaggaggga ggaggaaggg      720
aagaccccat tggtgggacc ctggaccagg ccatggatga aggacaaaga ccagggcagg      780
tcacgggttt cccaattccc cagcaattaa gatttcgagc agaatttatc taaatgtgtt      840
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ctgcccctcc ccctggcttc tttctcttgg gaaacgggc aaaataattg tgctggattc      960
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aaccgatgtg aacgcaaaat gccttgttca ttattcctga cgagatcttg aggttgtttg     1080
atgctttaaa ttttttaatt atattatttt ctaggtgttt attggtacat tgcagtttt     1140
tttttgaaat ttaaaaattt ctgtaaaact ttgtcttcaa gtaatctgac agcattaaat     1200
attgcattta aaaattaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1260
aa                                                                   1262
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<210> 545
<211> 1624
<212> DNA
<213> Homo sapiens

<400> 545
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tgggacttgc ggccaccgcc ccccggctgt cctccacgct gccgggcaga taagggcagc      180
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agggcccagg tgagcgagcg ggagctgcgg tatctgtggg tcttggtgag cctcagtgcc      660
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caaagctccg tcctaaactg gcaggactgt gaggtgccaa gtcctcagtc ttgcagccca      960
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cccgctcact ccacgggctc ggtgaggccg gtcagggcac agggcgaggg cctcttgccc     1080
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cggtgccaag tgccacatct tgccatagtg gatgctcttc cagtttcttt tttctattaa     1560
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tccc                                                                   1624

<210> 546
<211> 224
<212> DNA
<213> Homo sapiens

<400> 546
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cattataata ttttctattt tgttctgtct ctttttttgt tcatgcttga cacaaaacat      120
taaattggtt ttgcaaccta caatttgaaa taaaaatcac agatgtattt attccaaaat      180
agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa                        224

<210> 547
<211> 1567
<212> DNA
<213> Homo sapiens

<400> 547
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<210> 548
<211> 1681
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<212> DNA
<213> Homo sapiens

<400> 548
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gacccgtggt cccgggtcct ggcgctggca tcccgggcaa aagcggcgag gaacgcttga    180
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gaaaacccc agctgtccac ccatcccctg ccccaaaacc agtttcaata aatttacgtt     1620
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g                                                                    1681
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<210> 549
<211> 697
<212> DNA
<213> Homo sapiens

<400> 549
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catccagcca gcccgctacc acgtggcctt tggccctgtg attgatggtg atgtcattcc    180
tgatgaccct gagatcctca tggagcaggg cgagttcctc aactatgaca tcatgctagg    240
tgtcaaccag ggcgagggtc tcaagtttgt ggaaggggtg gtggaccctg aggatggtgt    300
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tgagggtaag gacaccctgc gagagaccat caagttcatg tatacagact gggcagaccg    420
tgacaaccct gagacccgcc gtaaaacact ggtggcactc ttcactgacc accagtgggt    480
ggagccctca gtggtgacag ccgatctgca tgccgctac ggctcgccta cctacttcta    540
cgccttctat catcactgcc agagcctcat gaagcctgct tggtcagatg cagctcatgg    600
ggatgaagta ccctatgttt ttggggttcc tatggtaggc cccactgacc ttttcccctg    660
caacttctcc aagaatgatg ttatgctcaa aaaaaaa                             697
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<210> 550
<211> 733
<212> DNA
<213> Homo sapiens

<400> 550
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atcttacatt tttgttgtta gtactaaata tttgtaactt tcatgtgagc ttttccttaa    120
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accataaatt attttagaaa tctgcctttt aatttctaaa ggtattttta tttttcagt      180
taaaaaacta ctattgtttg taatgttatt gcaattacag aacctggttt atgtgatata      240
attttttttg aactgcattg agaattgctt tcacaaaaga ctgtatgttg tatttattgg      300
gatgtatatc aagctattga ttgtattgct tgaatcattt gcactcttat catgcttaat      360
ggaacagttt ctgatggaga tgtgttgaaa aaaaccacta tgattgtgta tttgtcaatt      420
tgtactttac attctggtaa tttttggcgt atgtatttca agggtatttt gttaggtgaa      480
gcaaatttat gatttctaca tcttattagt tatgttttct tttattatt agctcccttt        540
ttatctttat tagtattgtt ggccttaatt ctatttgact aaattaatac tattaaattg      600
gccttatttt caaattttta tgcccagttt ttgaataaaa agcctagata ttctataaaa      660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      720
aaaaaaaaaa aaa                                                         733
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<400> 551
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atgagacaat ttataaccca ttaggttggg tggaaaattg tttctcaaaa gcaaataagt      180
aataaatctg gtatctgcct ataactcaca gttgataaga aagtggccat ttctcactag      240
cattatatat gatttgggct ctgggtaatt tggaagtgtt aggtttgtgt ctttgtagca      300
gtatttttat tagaaaagaa tctattggcc ttttacaggg tattaatccc tttgtcacct      360
accattgatg ccttaagttt tctgagtctc aattaaaaat cttccttttc ttgatgcatg      420
acaagtgtaa tcagtacttg ctcatttatt tgtctgtatt tagtttatgc tgtactattt      480
aattatcctt ccagcgtttt tttttctcct tacaaatatg atactcttta gtgttaagct      540
aaggcattga ttcatgtatc tgtccttata atgaattaat aaactatttt ccagaaaaaa      600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      660
aaaaaaaaaa aaaaaaaaaa                                                  680
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<400> 552
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aaactgtttg ctatttttat ggaacatgaa agcacataaa agttctggtt ataatgggct      180
actaggaatt ttactctatt tgatatattt cttgcttttt gatattttcc aacaatttgt      240
tcttggccct tcttgggaag catcagtcat tctcaaactc cagatatgta tttctaactt      300
gaaaggttag cctggatgaa tcccatcagc acctgctgac tgtgtctttc tgccattgat      360
tgaagaccca ctgggtctct tccaatgcaa cactgataaa aataaaacct gatttcccca      420
tcagttaatt gtgccgctat tgacgcacgt gcctaaaaga aatcttgtgt cggccttctt      480
caaaataaat ggtaatttat tcagccattc attcaacaaa ttcatctcta catttattga      540
tacctactgt gtgctgggtg ttacagctac tatgacgagc aagagagaca aacccagtcc      600
tcaagattat tacagtatga cggggaagtc atactatgaa caaataatta taaaagtcag      660
taatttttta gtaatcattt agtaaatgct ttgaaggaga agcacaggaa gtgtaaaagt      720
gcaggcaaac ggaagttaga cctacaggga ttccattttt gccccttttt attatatgga      780
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gtatcctttt tcagctttgg cttctaatga gcactgcata ctagctaccc agggccactc      960
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ccctttagct ttcacacttt catagacact tggcctctac ctcttcctgg gtggcagtaa     1140
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aaggggtctg gaccttggaa tcagagaaac atgaggcttg agccttgtgt ttgtgaacta     1260
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gattataaag attgacttta aatgcaaaat gcttagtaca gttcagggca tctagtagac     1380
aactaaaaaa tgctcatttg catactcttg tatcatattg gattgtcatg taactgtctg     1440
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cttcccctga gaacaagagc catgtctttt tattcctatg ttgattctgc cttgatttat   1500
attctaacta aatttcataa gtattttcct cccaactatg tttctttcat gcaagaagct   1560
tttaaatctc cacaacaaaa atggaaactc aattgattat acagattgaa tgaaaaacaa   1620
aacaaatatt tctagtaata aaaaaaaaaa aaaaaaaaa a                        1661
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<210> 553
<211> 1336
<212> DNA
<213> Homo sapiens

<400> 553
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gaaaaaaaaa aagtcaagaa actgaaattc ccatttaagt tctcaaatca gtgatctgtc     60
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ttaaaaattt ttaatgaacc ttacattgtg aacataattg caacatgttt taagacaaac    180
agtatttaat ccttgaagac ctgtcttgta tgtctctcaa ttttgtcaga atttttatta    240
ttgtttttca catatgtgaa ataagcagtt ttttcagggt acatagggta tctttgtttt    300
acagattttt aaagatgagg ttttgaaaag ccctcagagg tttttgttaa aagactatct    360
tgcttaataa atgacaactt gttacagatt cacacattac aagtaggaca gtataacagg    420
agattggtgt gtgaatgcta caaaacagtc agcaaaagga atcgtttgct tgtgaaactt    480
cagaggtacc ctgaaagtca tttcctaaag ctagtgcatg tgaatytttt ccttgaattg    540
tgcagaataa ttggattgag gcacatattt tgaggagtag caagtggaat ggtataatga    600
ctacagagaa aattatcttg aaatatagca aggaagagaa acaagttttc tttctccact    660
ttattgttgg actaattggg tcaatttgct gtgacatatc aaagatctct ttgtgccagg    720
ccaagactgg ctactgagtt ctcaaagcgt tttaatatat agattacgta tgagtgccta    780
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cataggaaag agcattgaaa tacatttttt gcataaagat acctaaaacc atctacccag    960
cttagggttg aactgaattt ctgtgaaata aatttgtttt aaatactaat tattttaaaa   1020
ctacttaatt cttaaaaaca atgtcatcag tttcaaaagt ttcactttgg gaggatattc   1080
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aaatgttggc tgtttttgtt aatatactta aaactgtaac cagtgaataa cacctgtagt   1260
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aaaaaagggg ggccgc                                                   1336
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<210> 554
<211> 3569
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (903)
<223> n equals a,t,g, or c

<400> 554
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cgccgcggtg ggggacccgg cgcagcggca cctgctgccg agggacccocg cggcccgccc    180
cggtgctcgt gatgggggctg atcttcgcca aactgtggag cctcttctgt aaccaagaac    240
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taatgaatga agtggttcat acttctccaa ccataggaag caatgttgaa gaaatagttg    360
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ggaacacata ttactcaaat acagagttca tcattcttgt tgttgatagc attgacaggg    480
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aaatctcgaa atacctcacc cttagttcaa ttaaggatca tccatggcac attcaatcct    660
gctgtgctct cacaggagaa gggttatgcc aaggtctaga gtggatgacc tcccggattg    720
gtgtgagata acttttttgc ttgaaagaga ctgctctatt tattctgtga catgaacatt    780
ttttcctagt acctttggct gctaaggcag cagcatgttt aatttataac aacacaaacc    840
tctgagagca acacttgaat caagtgcagc tgaactggaa cataaaagat ttttcttaa     900
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ttnttttttt tttaacacac taatcttcag ttggatgaat gtaatgtata actatgtttt    960
cagcaacaat tcttctgttt attctaatta atcagtgact gccttgtaag aaatgtttgt   1020
catatgcgtg atgtcttctg aaatattctt ataaccttaa tgaccaattg ctttcaattc   1080
ttgaccagca ctccctccca accagagaat tactggtttg atagagtagt cttggaaacc   1140
atcaggtact gcctgcagac ttctccagca ctaaatatat ttgttccctc tataaaccat   1200
tcatctttcg gacagaactt actgtaaaga aagaaatctg cctagaggat atatgtaagg   1260
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gaataatgtt taagttgtta tttgcatgga aattaagtag gctgtttatt tatctaaagg   1380
aatcaagtcc actcttctgc ctgcaacatt tgttcaaaaa ctaaccaagg taaaatattt   1440
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cacattattc aatgcatata aaactatcag aagttagtaa atcataccag cactaaaaat   1560
aagacaattg gaatatattt tagcatcagt ttacaaacaa ctttattatc aacagaaatt   1620
ttagctcttt tctttgcaag atatatcaca gctgcttgg gcagtagctg aagccgaagt   1680
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gccatttacc taagcacagt ttgcctgaat ttctgcttgg ttgtgttgtt taccgtaagt   2640
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cacagtttat agtaagtgaa aagcaaggga cccacctaca ttaccttcag gagactgttc   3420
tacctttta tttgaaaaca aggaaattaa attttaacag aaatctttta agtatgttat   3480
aaccaaagtg ttcaattatc cttgcaagtt caaatacagc atttttctta aaaaaaaaaa   3540
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<210> 555
<211> 2074
<212> DNA
<213> Homo sapiens

<400> 555
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ggaacagctg gagcgcattg gactgttcag tcatgcggag attaaggcta tcattaagaa    180
ggcttccgat ctagagtaca aaatccagag aagaaccctt ttcaaggaag actttatcaa    240
ttatgttcaa tatgaaatta atcttttgga gctgatccag agaagaagaa cacgcattgg    300
atattcatta agaaggatga gattgagaat tctattgtac accgggtaca aggtgttttc    360
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tgtaagaagt gggctactaa aactcgactt agcaaggtat tctctgccat gttggcgatt    480
cattccaaca aaccagcttt gtggattatg gcagccaaat gggaaatgga agatcgattg    540
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tcttcagaaa gcgcaaggca actatttctt cgcgcactgc gctttcatcc agagtgccca      600
aaactttata aagaatactt taggatggag ctgatgcatg ctgaaaaact gaggaaggag      660
aaggaagaat ttgaaaaagc cagtatggat gtggagaatc ctgattattc tgaagaaatc      720
cttaagggcg agttggcatg gatcatctac aaaaattctg taagcataat taaaggtgca      780
gaatttcacg tgtcactgct ttcgattgca cagctatttg actttgccaa agatctacaa      840
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caaatttgta ttgagtccat ctgtaatttg ctcagtgatg gcagacaaga tggctgtctg     1980
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<210> 556
<211> 2010
<212> DNA
<213> Homo sapiens

<400> 556
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ggccaaaggc aaaaagggat tttgggggg gggttgttta tgctatagtt cattaatgaa      840
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325

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tgggctttga tgtttaataa agtagaaagc actgtcaaaa aaaaaaaaaa aaaaaaaaaa    1920
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<210> 557
<211> 1426
<212> DNA
<213> Homo sapiens

<400> 557
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<210> 558
<211> 2382
<212> DNA
<213> Homo sapiens

<400> 558
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<210> 559
<211> 1735
<212> DNA
<213> Homo sapiens

<400> 559
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<210> 560
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<211> 1581
<212> DNA
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aaatagctta tgtatattat ttatttattt ttagagacag ggtcttgctc ygkcagactg   780
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<210> 561
<211> 1226
<212> DNA

<213> Homo sapiens

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<222> (234)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (775)
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<221> SITE
<222> (863)
<223> n equals a,t,g, or c

<400> 561

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<210> 562
<211> 3840
<212> DNA
<213> Homo sapiens

<400> 562

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ttctccagta cctaaccatg atttacttca tgggaagtcc ctcaaagtac tattaattat   3360
cctgtgttct cctgccttgc ctcttaacaa aaattctgct gttcctgatt atttccattt   3420
taccagtgtt ttgttccttt tctatccagg cagcataatt cgttgtatga ggcgcctgga   3480
agaattgctt cgacaaatgt gtcaagcagc aaaagccatt ggaaacactg agctggaaaa   3540
taaatttgca gaaggaatca ccaaaatcaa gagagatatt gtgtttgctg ccagcctcta   3600
cttgtagagt cagctaaagg aatgtgagat tttaaattat tgaccacctg tttgattaca   3660
gttgactaca aatgcctgca agtgtggatt tggttctccc atacatttta atatgtatta   3720
tatttaaatc aaacatcatt catagaaagc atattacata catgtttata cataagcatt   3780
acattttttt aataaaaatg tatacaggtg ggaaaaaaaa aaaaaaaaa aaaaaaaaa   3840
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<210> 563
<211> 2243
<212> DNA
<213> Homo sapiens

<400> 563
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cgcctgcagg taccggtccg gaattcccgg gtcgacccac gcgtccggct ttctgcccat     60
tcctagcatt ctggtgcaaa acgatctggg atggcacacg ttttttaccct cacagttctc    120
cagcatctaa atatctgcag taggttctcg ctggacaagg acacgggact catcatgctg    180
attgccaggc tggactatga gctcatccag cgcttcaccc tgacgatcat tgcccgggac    240
ggggggcggcg aggagaccac aggccgggtc aggatcaatg tgttggatgt caacgacaac    300
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330

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gtgcccacct tccagaagga tgcctacgtg ggtgctctgc gggagaacga gccttctgtc      360
acacagctgg tgcggctccg ggcaacagat gaagactccc ctcccaacaa ccagatcacc      420
tacagcattg tcagtgcatc tgtctttggc agctacttcg acatcagcct gtacgagggc      480
tatggagtga tcagcgtcag tcgccccctg gattatgaac agatatccaa tgggctgatt      540
tatctgacgg tcatggccat ggatgctggc aacccccctc tcaacagcac cgtccctgtc      600
accatcgagg tgtttgatga gaatgacaac cctcccacct tcagcaagcc cgcctacttc      660
gtctccgtgg tggagaacat catggcagga gccacggtgc tgttcctgaa tgccacagac      720
ctggaccgct cccgggagta cggccaggag tccatcatct actccttgga aggctccacc      780
cagtttcgga tcaatgcccg ctcaggggaa atcaccacca cgtctctgct tgaccgagag      840
accaagtctg aatacatcct catcgttcgc gcagtggacg ggggtgtggg ccacaaccag      900
aaaactggca tcgccaccgt aaacatcacc ctcctggaca tcaacgacaa ccaccccacg      960
tggaaggacg caccctacta catcaacctg gtggagatga cccctccaga ctctgacgtg     1020
accacggtgg tggctgttga cccagacctg ggggagaatg gcaccctggt gtacagcatc     1080
cagccaccca acaagttcta cagcctcaac agcaccacgg gcaagatccg caccacccac     1140
gccatgctgg accgggagaa ccccgacccc catgaggccg agctgatgcg caaaaatcgtc     1200
gtctctgtta ctgactgtgg caggccccct ctgaaagcca ccagcagtgc cacagtgttt     1260
gtgaacctct tggatctcaa tgacaatgac cccacctttc agaacctgcc ttttgtggcc     1320
gaggtgcttg aaggcatccc ggcggggggtc tccatctacc aagtggtggc catcgacctc     1380
gatgagggcc tgaacggcct ggtgtcctac cgcatgccgg tgggcatgcc ccgcatggac     1440
ttcctcatca acagcagcag cggcgtggtg gtcaccacca ccgagctgga ccgcgagcgc     1500
atcgcggagt accagctgcg ggtggtggcc agtgatgcag gcacgcccac caagagctcc     1560
accagcacgc tcaccatcca tgtgctggat gtgaacgacg agacgcccac cttcttcccg     1620
gccgtgtaca atgtgtctgt gtccgaggac gtgccacgcg agttccgggt ggtctggctg     1680
aactgcacgg acaacgacgt gggcctcaat gcagagctca gctacttcat cacaggtgct     1740
gccccggcct ccgcccacct gtgcaggcct cctggggccc tgcctccacc cctcccagat     1800
ggacagccag actaggtggg ggcaggtgag ggtggaaaag aggtcagggc tctactgttg     1860
ggctttagcc tctggtggtg cctcccgagg atttgctcct ggctcttccc aagggctttg     1920
cagctggatc actctggact ggctccctgg ggacctcctg aacctgttgg ttgcagggac     1980
ggggagcatc taccaaggtt cattctagag ggaggtaagg ccccatgatt cctagggagg     2040
agccctgagc cccactcccc gccccaagtc tgggtgacag agcagtgact tggaggaatg     2100
tggcctcatc cttccttggg gacctgttga gaattcccac ctgtttagag gcagatggtt     2160
ttgatctccc taaatgaaat ggttttagct caaaaaaaaa aaaaaaaaa aaaaaaaaa      2220
aaaaaaaaaa aaagggcggc cgc                                            2243
```

<210> 564
<211> 1635
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1018)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1176)
<223> n equals a,t,g, or c

<400> 564
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ccacgcgtcc gccaagatgg aatgttgagt atttgggatg ttagacaagg tactatgcct       60
gtatctctgc tgaaggctca tgaagctgaa atgtgggaag ttcactttca cccatccaac      120
ccagaacatc tttttacctg ctctgaagat ggatccctct ggcactggga tgcttccaca      180
gatgtacctg aaaagtcgtc actctttcac caaggaggaa gaagcagtac ttttttgtct      240
catagcatta gtaaccaagc taatgttcac cagtctgtca ttagctcctg gctcagcact      300
gatcctgcaa aagaccgaat tgaaatcaca agcttacttc ccagtaggtc tctgtctgtg      360
aacactttgg atgttttagg tccttgtctt gtttgtggaa ccgatgcaga agcaatttat      420
gttactagac atcttttttc gtagaagtac tataattata agatttcaga tagaacatgc      480
aattagcctt ttgaaatcca acttctgtgc aaaattttag tatcagaaaa tacgagattt      540
gcaggggaaa catcagtaaa ctaccattaa tgtcaatgcc cagttttgac ttttgttagc      600
ctgacactcc caaacagttg tagaatccga tagatgactg atggcaaaag attgtgaaca      660
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tgtggaagaa aatcagtggg attctggtgc tgatgaatag gttgccttca gagtattatt      720
gacagacagc ttgtggaact aattctttat ttttgatgtt gtgggaatta acacatcaat      780
ggtggttatg ggaactacca atgggttcct acaattttta tcagtagtat gtggcatata      840
caccttccta gtggcagttg ccaatgttaa tgattattct ttttattgca agtatttcct      900
atgatccttc cacactttat ttccttaata ataataaact ttttcagaaa gaattgagta      960
gagcaaaaat gacaaagatg tgtagctgtg ttcaattttt tttttttttt ttttttttnga     1020
ggcagagtct tgctctgctg gagtgcggtg gtgcaatctc ggctcactgc aacctccacc      1080
tcccaggttc aagcaattct cctgcctcag tctcctgagt agctggaact acaggtgtgc      1140
gccaccacgc ccagctaatt tttgtaattt tagtanagac agagtttcac catgttggcc      1200
aggatggtct cgatctcttg acctcatgat ccacccgcct cgacctccca aagtgctgtg      1260
attacaggtg tgagccactt cactccagcc tgggcaaaag agcgaaacgc catctcaaaa      1320
aatatacata tataaggaga taaagtttcc cattttccaa tacagtttca catttgaaca      1380
gccctaattg atacaacttt atggcagggt tttagtgtgt gagtgggatc caaaacactc      1440
aatcctgtaa aagggtacag tcctattgta tgttaacaca ctgatgatgt gagcctgtga      1500
gatgagccaa tcaccagttg ttatgttcga atctgctttg tgttgggacg ctttaatgtc      1560
agggtttcac taaataaatg aattttcata tactgaaaaa aaaaaaaaaa aaaaaaaaa      1620
aaaaaaaaaa aaaaa                                                       1635

<210> 565
<211> 1533
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (775)
<223> n equals a,t,g, or c

<400> 565
tcgacccacg cgtccgggct ttctccaagg atgaacctgc ttattagagc ttggcctgtg        60
atttcttaca tttcttatag tttaatggtt aagagtgtgg gctgtgtacc aggttgcctg       120
ggttcaaatc ccagctctga cacttaaagg ttaagtggcc tagacataac ttccatgcac       180
ctaacctacc tgaagagttg ctaagcagat tagatggatt aatacatctg aagagcttag       240
agtggtgcct ggcacatgac gaacactcca tcaactagtc atggattagt cgttcttttc       300
ctgccttcct ctctagcctt gctgctcaag agccatagac taagaatgag aagggctgtt       360
aaagacacct ctagtgcagc cttttaaatt taccgataag aaatcagagg cctgaagaga       420
agtgagttgc ytgaaagccc acagcaagtc agtgacaggc caagaccaga tccaggctgc       480
ctgactccag tttcttcctc gggcccccat gacctttcca ggcgccatgt atgtttctcc       540
ctggtctcag ggtgagggta gaagataacc tttctgaaag aggccacgtc cctggcctcc       600
cagtgaagca ctaggtgaag ccaggccaaa aagaaagcac ttctctggag acagtttcca       660
ggaggagatt tttactttcg agaagagctt tattattttt gtgaaaataa tacatgcgca       720
tacttaaaag attcaagcca ttygggaaag tacaacgaaa acagcaaaag tcccntttga       780
ttctaccact gggattcagc cactgttata tgttggtaaa catccatctg gacatcttgt       840
acatatatgt agacatttta tttctttaat tatctttctt attgtgtttg atttgtcrag       900
caaagttcat tttctggctc taggtaagca ttccaaatag tgaaactcaa atagtgaagc       960
tgaaagtggg gcagccttca tattggagaa gtggccagcc gtgcctaacg ggctgtcaga      1020
gatgatctca tagcatcaga ctgggctcag gcctcgggca cagagaggtc ctcccctccc      1080
ccagtctggc cacagagcct ttaaaatcca gagaatcagg gctgcagccc tgccaggggt      1140
ttggagaacc ttccaacacc ttcattttat agatgagcaa actaaggccc tgagaagtgt      1200
ccttcgctct taacctagac tttgtacatg gtctcgttcc ccgctttaat agaggaattg      1260
ctttatgtcg taggactgga ccttgctgcc tttgggttgg ttcctggaga agcaggaata      1320
accacctgcc ctcctgcccg gaggcctttc ttcccaggtg actcacaatg ccaccctggg      1380
gtggggctca cggtcaacct gataagggac tgataatgaa atttctgtac caactggctc      1440
cacacagggg aaagatgttt tctgggtaag tctggtcaga agaggttgat gggggggaaa      1500
caaaacagcc aaaaaaaaaa aaaagggcg gcc                                     1533

<210> 566
<211> 2185
<212> DNA
<213> Homo sapiens
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<220>
<221> SITE
<222> (774)
<223> n equals a,t,g, or c

<400> 566
gaaaacaaca aagcagggta tctgtcaatt gatctgtaga cccatttcct catcacaccc   60
caaatctgtt atgtggtggc tatgcatttc tggatctgag gcatttgtgt agttagtttt   120
aaggtatgtt tatttattat tttattactg tgaacagatt gcagtgtgtg tatgtgtggt   180
gtgtgtctgt gtcttctgcc tagaacaata acctcctttc ctttctccca catcactgca   240
cttttggctg ccgctgtggt ttgttgcaaa tctgagctca ttaatcccac agagtattaa   300
acaatatctg gtctcggtgg ctctgtcatt ccactgcagg cgtcccacct tcatttgcca   360
gctgggatct cttaatgagc tagctgtgca cagttcaata gtaaaamcct tttagctggt   420
gaaatatgtt tgaagaactc actgttggag tgttccatgt gaggcctgct tccactcytg   480
ctggcattcy cttttcagga tggctgcagc tcctccaagt tactgttttg ttgccttccc   540
tccacgtgct aaggatggtc tggtggtatt tgggaaaaat tcagcccggc ccagagatga   600
agtgcaagag gttgtgtatt tctcggctgc tgatcacgaa ccggagagca aggttgaggt   660
aagccgwgca ttgcagtctc gcgagtcaca ctctcttttc tctggctttg ccgctagcac   720
aaccctaact tcttgcttgg aagcttgctc acaagtcaga gctatcatgt cagntctgct   780
gattcctgty tccatgcagg tttgctcata gccttgaaaa caaggtcatg ggagagctct   840
atgctcactg ctatggccat tgttttataa ttaagtgaaa tatgtacata gttctgaaat   900
caaatctaaa aaacaagatt tattcataga agtctaactt gtatccttgt ccccttttact   960
ccatgatctt ttcccctata ggtaatcatg ttttggaaga tcttggttta tccttccatt   1020
tgcaaaatta cacatatata tgtaacaaat cacacacaca tgtgcatatt catcctggtc   1080
cctttcctcc tttcttcgat taacagcagc atgccatata tacttttctc tactttgcat   1140
ttttttttcat ttttattttt ttattttctt caatcagctt tctcaggttg aatctctact   1200
ttgtattttt caactcaaaa catattctgg agatcactcc ctacggtaca tgcaggtcat   1260
aattcctcat ttagagctgc atggtgtttc attctatgga tgtatcatag ttaaccagcc   1320
ccatattact gctggacatt tggattgttt tcagtctatt gctattacaa acagcactga   1380
agtggataac agccttatgc atctgtcata gtgtctggtc tcagtttata tatttttatc   1440
ataataaaac attatccatt aattcttatt tcaaatcttt taaaaatact atttttgtca   1500
gtatttcttt gggatagatg cctagaaatg aaattgctgg gtcacaaggt aaataaaaat   1560
gtaattttat taaatattat caaatttcct tccataggtg gtgtaccgtt ttgcattccc   1620
atcagcactg tatgacaatg cccatttctt catattccca gaatgtgttg tcaaactttc   1680
acgatggcta ttttatgtta attatacttt ctgccatttt actaaattct tttattggtt   1740
gtgtcagctt ttatcattgc ttttcttggg gtttttcaggt atatttttat atcacttgca   1800
catagagatt gtttagttgt tgttctgtct ttaattgttt tcttgtttga ttgctttggc   1860
ttatagctcg ggttttatgt taagtagtag tggagatagt ggrtgtcctt ggctctgcac   1920
ctgacctgag tggggctgtc tctagtgctt ccctattaag taagctgctg gttttgggat   1980
tgagatttat atagttttat gtgccactgc acctggctta tgataaaaag tatacatcag   2040
tcaggtacag tgacacatgc ctgtagtccc agctaccctg gaggctgagg tgagaggatc   2100
acgtgagccc aggaagttga gaccagcctg gacaacatgg tgagacccca tctctttaaa   2160
aaaaaaaaaa aaaaagggcg gccgc   2185

<210> 567
<211> 1119
<212> DNA
<213> Homo sapiens

<400> 567
ccacgcgtcc ggcaaaatgt ggcatctgtt agtttttatt gtctgtgtct tctttgttta   60
ctataccttg ggtaattttg tgttaccaaa aaaaaaaaaa aaaggaagtg taatgtcaga   120
cacacaagaa aagcaaatca gtgttgtaag cttaaagtac aatttcaaag gtcattacca   180
acagcagggt ttttttttata ctttaaaaac attatgctac atatcattgc cattttcata   240
ttttgggggtt ttgctactct tatacaatgg aatcaatgga aatgtcatcc agccactgaa   300
ttgccattat tatatctaaa aagtttctaa gatgacagtt atcactattt tgtttttatct   360
ccatgctgac atttgaaaga aggtactagt atccctctag ccagattgct tagttttttcg   420
ttggtaatca aacaacagtt gtactaaagg aaagtaaagc taggacctaa atcagaatca   480
tagttgcctg catatatggt aacaaggtcg tgtgcatttg ctttcacagt gatgagtgag   540
aggatgagaa gaaattattt gacatttttc tgtggttgaa tagaagacac ctttcttttg   600
tctttaggtt taggaggaga tactaagata ctggatgttt atcctatctt agtttggttg   660

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gagtaataag agagaagaag agggtggact ttggcttttc agtgtttttt cccctaaaga    720
gtgatattgc tgacgtttct atcaatttta cacataatat gtggctatga aaccatatat    780
ctcacttaag taacaaagta atcactttgt ctatcactaa gtaatagaca aaaatcattg    840
tctattattt aaagccaaca aaacagtgta acagttttaa gttcaataat gttaagtatt    900
gtatagaaat atattggagg caaagttcag ttgatgacaa ttgtgtatat gttactgatg    960
ctgtaaatta tttttaataa agaaaattgt attatcaaaa aaaaaaaaaa aaaaaaaaaa   1020
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa                          1119


<210> 568
<211> 2608
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2525)
<223> n equals a,t,g, or c

<400> 568
tttttttttt tttttttgaa gatcagaatg atttttatct tatctggttc cagagtggtg     60
atggagacaa aaatcaatta cagacagaat tcctgaaatg taaattgttt ttaatatatt    120
taagagcaca cagaagtctt gatttataaa aaaataaata tataacatga caaatttact    180
gatgatcctg gagctctgag gtcaaactct ttaaatgatc agtgaaaaca taaaacatcc    240
atgatctgtt aacacacaca ggagcatatt ccagttgtaa aaaacaaatt ccttgaaggc    300
tcagaacgaa caaaaatcag tctttatggc agaaagcaca tccaaagcta ggcaatgaag    360
ttcagcctgg gccacgtgaa cctttcacca gccagcctat aacctatgga gccaggacag    420
gaaagcatga tccttcagct catgacgcca cccaggcttc cagacaactg cagaatgaaa    480
gagtccctca gaggctcccc agcccctgct gccatcataa agcacgggag ggattgtttt    540
gtccttagcg gctctgtcct aaatttgaga gcaggagact gagaaggtta tgctcattaa    600
atattgtcat tgtaacacgg aatggaaatc atgatccttg cccatgggca ctgagctgaa    660
agaaagagga acctcacatg aggctttcct agagaccagg atgttgggtg agtgggcgtg    720
cacttctcaa gtgggcaagg aagaactgct tttctccagc tgacatgctc tcaggggtga    780
agaagtttag cttaaaatac ctgatggcgc tgcataaact ggggatttgg gaactgagtt    840
tttagctctg tgacacacaa cataaaaaac aaaaatccag tctcattagc taaattcgga    900
ttaaaatctg aaatgttttt atggagttgc caacaggctg gaatgtacct gatacarttt    960
aatctgcttt tatttctttg gctgtcttcc aaaccacttt cttcctgtaa ttcttaagtt   1020
ggctagttct ccttcctcag aaaaattacc cctaagaatc ttcctaatag tgagggtgta   1080
cttccgaata gaagagtcct tcggctgaaa tggcatctcc aaggcctaca gttcgaatgg   1140
ggtctttaca caccaatact ggtgtgaagt ggaaggatat tccctctctg tgccattcta   1200
ctactggctt gtttgggttt aatacaatcc tggagcctgc ctccgaatgg gaagtcatga   1260
actcttgggg tgccctcaga gacactcggc tggtgtctat ggtttctgtg gcgcaggcct   1320
gtgtcccagc cacacgagct cctgcagcca cggctgccag ctggttggcc cagtgtccat   1380
ccacagttgc caggatgtgg tagaccagcg tgtggaaatg gatcctggtg agatccgagg   1440
ctctgctttt actcctccca tgttctttca agatccagaa gaggatgtca ctgaccatgc   1500
ccacatcagg aacaccgttc caggaagaga gagaagagtg aggtccagag gctgactggg   1560
tgagaaataa cagctcctgt tcattcagcc caagggaagt caccgcggga aagacctgct   1620
gatggacaat gctgctcatg agctccctgt tagtcatact ggccagctct aggtgaactg   1680
gaataccagt ggggatgtca gaaatggagg ttacaacctc caagagtctc ttcctctgga   1740
gctccttgct ttgtccctcc atcatgtgca atccagagag gaccaccagg tctggctgaa   1800
actcctccag gctagacaca aacacctcca gcatattcat ggcccgttg gagaggtcgt    1860
gagagaagat gaatcggttg gcatggggag ctttttaactg gccccactcc tcccctgctt   1920
gatactctaa aatgaggtgg aactcatcca cttcctgcaa tgactctggt ggaacaaaga   1980
cattgtcatc aagaagctca tgtagctttg gaccaactgg accgcaaaga agaaccttta   2040
aatctgagtt ggctgcaaat ttctgtccaa ttaaagctgc atttcctcct acatagtgct   2100
gggctcctgg gaactctgac gcaacctggg caatgtcgtg aaaagtttcc ttatcactga   2160
agaagcgctc agcagctgct cccttcccca tgaagtgaat gaaggcttct tccagatcat   2220
tccttgaatg cagaatgctg tgatctttcc cattcccagg actaaggcca agtgcctgca   2280
agagcttcac ccctgagagc accacatcaa cacatgcatt gactcccact gccacgcggc   2340
gccagcgccg gactggccgc acgataagcg cgtcccagct gccgccaacc ggccctcggg   2400
ggagacgggt cccggggggcg caggcgcggg ccccagacac agcgagctcc agagagagcg   2460
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cagcgccgag cctggcagct ctggctccag caggaagacg cagcccacgg ccagcgccag    2520
gaagnccgcg tacgcggagc cgcgccacag cgccatgggg acccaggcgc cgcacctgcg    2580
cgaaccaact cctttcctag cccgcgcc                                       2608


<210> 569
<211> 2322
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (135)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (168)
<223> n equals a,t,g, or c

<400> 569
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cccacaccca ggcctcttta cccctaccgc cccgttacct tggggacggg atcacccgac     120
ccggcgccgt gcgantgcgc gggctgaagg cgggggcggt gccatgangc gcctcggggg     180
crtacctcgg gcgcgcaccg ctctcttaca ctcgggcctc agaagtccgt gccagtgacc     240
ggaggcggcg gcggcgagcg gttccttgtg ggctagaaga atcctgcaaa aatgtctctc     300
tatccatctc tcgaagactt gaaggtagac aaagtaattc aggctcaaac tgctttttct     360
gcaaaccctg ccaatccagc aatttttgtca gaagcttctg ctcctatccc tcacgatgga     420
aatctctatc ccagactgta tccagagctc tctcaataca tggggctgag tttaaatgaa     480
gaagaaatac gtgcaaatgt ggccgtggtt tctggtgcac cacttcaggg gcagttggta     540
gcaagacctt ccagtataaa ctatatggtg gctcctgtaa ctggtaatga tgttggaatt     600
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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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338

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<212> DNA
<213> Homo sapiens

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340

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<212> DNA
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<212> DNA
<213> Homo sapiens

<400> 579
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<213> Homo sapiens

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343

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<210> 582
<211> 554
<212> DNA
<213> Homo sapiens

<400> 582
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<210> 583
<211> 1422
<212> DNA
<213> Homo sapiens

<400> 583
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344

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<210> 584
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<212> DNA
<213> Homo sapiens

<400> 584
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tgcacagcca attcttttag gggaggaaat aggcagggaa tgtgtaattg ctattttaa     540
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<210> 585
<211> 1430
<212> DNA
<213> Homo sapiens

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cgatgggaag acccagcccc aaaccagact cttgagcacg cagccctaaa ccagactccg     180
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<211> 1719
<212> DNA
<213> Homo sapiens

<400> 586
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gaggaggacg tagactttat caacgagtac gtgaacctcc acaatgagct gcggggcgac       180
gttattcccc gagggtctaa cttgcgcttc atgacttggg atgtagcttt atcacggact       240
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aatggcagtt gctctggaga ctgttctaat tatattcagc ttgtttggga ccactcttac       480
aaagttggtt gtgctgttac tccatgttca aaaattggac atattataca tgcagcaatt       540
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ttttgtactc gatgtggcag acgtgacaaa tgcacagatt ttctatgcag taagataaag       660
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<210> 587
<211> 797
<212> DNA
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346

<213> Homo sapiens

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<222> (779)
<223> n equals a,t,g, or c

<220>
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<222> (793)
<223> n equals a,t,g, or c

<400> 587

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ttactaaatt atgcagttta aaatggatga ttttatgtta tgtggatttc atttcaataa     660
aaaaaaactc ttatcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaang     780
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<210> 588
<211> 1868
<212> DNA
<213> Homo sapiens

<400> 588

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<210> 589
<211> 2444
<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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<210> 590
<211> 686
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348

<212> DNA
<213> Homo sapiens

<400> 590

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gtgttcagag aaaattcacc aaacgccaca agtctgtgag gcatcttcac agcaagccca   180
gcttcaggga aacagcagcc aggccgcgta atgaaggcca actgaggcag cccccggggt   240
cagcctagcc cagggcttgg gccctccatc atggagagtg gtcaagtcag tctgtttggt   300
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acagtgaatc tcaggaggcc acagctgtca ggactttga tttcctggcg attcctcaag   420
tgtattctgc tggattttaa tgggtggtg tggaaaagtc cctaattaga tccatttgga   480
aatccctgag tgaaacaaag tctatttta ttgcgcacct acgagccagc aggagaaagc   540
tgtgtgcttg tctctttgca gcaatgcagc tgacctcgga aatgatgtcc aagaatgcct   600
gaagctgaga tggaaagtgg cagcacctac tatgtgccag gtgctctgga taaagctgta   660
aaaaaaaaaa aaaaaaaaa aaaaaa                                           686
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<210> 591
<211> 1112
<212> DNA
<213> Homo sapiens

<400> 591

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ggcaaggagg agaccccagg gcagaggcca gcgtgagtgt tgcgctctcc ctcgatgact   180
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ccctgctttc gtctgccttt cccatgcctt atttggctcc tgcttatact tgtgttctga   300
atatggctct gtcctttata tttccttcag acttttgccc ttcttttctc tagggtcacg   360
gagactcacc agttggcaga attaaatgag aagaagaatg aaagactccg tgctgccttt   420
ggcatcagtg attcttacgt agatggcagc tcttttgatc ctcagcgtcg tgcccgagaa   480
gctaaacaac cagctcctga gcctcccaaa ccttacaggt atacaaggcc aagaaaccac   540
tgtcagcttc tttcttgat tgtaagctcc atgctctatt tttgtctttt tgcgggctgg   600
tttcttccca aactcttcag attttgttct tctgaagttg aggtgtccaa aaaaatttgt   660
ccaagggtta gtcacagtgg gtcacgcgcg taatcccagc attttgggaa gctcaggcag   720
gagatcactt gaggccagga gtttgagacc agcctgggcg atgtagtgag accccatctc   780
tacaaaaaga aaaaagctg gttggtggca catgcctgta gtccaggctg cttggagagg   840
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gccactgcac cccacctgag gcaacagagc gagattctta tttttttatt tttattacta   960
ttttttttaga ctctgtcttt taaagaaaag aaaggaatgt ttgttctacc acccatctct  1020
gctgcttttc attttttccct agccttgttc gggagtctag cagttctcgc tcaccaaccc  1080
caaagcagaa gaagaagaaa aaaaaaaaa aa                                   1112
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<210> 592
<211> 1254
<212> DNA
<213> Homo sapiens

<400> 592

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ttcctgattc tgaacattgc tattttcttt gtcatgttgg caatgcaact gacttatttc   180
cagagggccc agagcctaca tggccaaaga tgtctttatg cagttcttct catagatagc   240
tgtattttat tatggttgta ctcttcttgt tcccaatcac agtgttagca ctgaagctat   300
aaattacctg gtcattttgt gatcacaaga gtctatgcaa aaaaaaaaat ttctttaccc   360
cagattatca gatttttttc cctcagattc attttaacaa attaagggaa gatattttga   420
cacaagaaag caggaacgtg gagaaattgg agcaggaaaa gaaattatca aagcaataga   480
aatagcttgg tggtcctatg gtgtttttgg aagtatttgg cattgctaat tgagcagtcc   540
atatagtact actttagaa gaaacaaaa gtctgtttt taaagtaatg ttttttctta   600
tgagaaaaag gtttagatag aattgggttt tattaatatt aatttaatgc tattagcaat   660
ttccatatac tatattgtgg aaaagactga agaatacaat tctgagaaat acaaaaaat   720
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349

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tttaatggta tactcatgtt gaaagataaa tgttgctaag tcctggtatg atggtgtgag      780
cttccttggg gaagtacttc ttgagttatg taactaacag gatgtttttac tacagatctg      840
gatggctatt cagataacat ggcaaaaaat gatagcagaa gatcattaaa aacttaaaat      900
atattttatt agaaacatt tatctatgaa tgaatatttc cttgatgctg gtctctgcac      960
acatatgctt ggttacttgc atgcattcat tggttgttca ataagtgaga tgattacaga     1020
taacttaata ctgtattttc cttatatgga aaaccgttat agacccaata acaactaaac     1080
ctttcaaaag aaaatatttt ctattatgaa tgttgatttt cataccaaag aagatggaga     1140
gtctaaaatt tggatatgat tcttatgttt ttttaataga aaaccttctt caagtttatt     1200
ttcctaaata aacatcataa ttgtgaaaaa aaaaaaaaaa aaaaaaaaaa aaaa            1254

<210> 593
<211> 1240
<212> DNA
<213> Homo sapiens

<400> 593
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aggagcctta ttttttatta tggcagcttg ctattttat aacatggtga ttgagttgaa      120
cacaatcaaa gtacagtagt aactgatgtc cccttcttcc tggatgaatg agcagataaa      180
tattgatgtc agcatccttg aaccatatca aagtgagcag tgtttggcta ctgcttctat      240
ttgaaatggt gctgtgtttt ggttgtggtc tgaagctttg aagcgctact tagcatctcc      300
tttcttccat ggagctctca cgattcaaac atgacagatt tggtaaaatg ctggttaggt      360
tgagtcttcc ttgcccccac tcagtcatct ttgtatgaat cccatgattt gggggttttt      420
ttctttttttt tttataccag tttttagctg gtgtttatga agaacagtga gtacctagaa      480
ctgtgccact aattaaagga aatcctaaga aggtgcattt ctttacagag ctgtgtcatg      540
ccatcctttg ggccctctgc tggaaaagta gaatcaagtc tcaaataatg ccttttaat      600
tgtatcctct agtattatag atataggaca gtactgtatc atacctctgt gaatgtaaaa      660
tatcttgtac ctgctttatg atacgtagta gtgaccgtgc tttatcagag ctgtttttaa      720
tgatgttatt ctagaatgtt ttctttccag atgatgattc agaagctaat tttaaaaaac      780
ggtgccaggt accacaacag taacagaact ttgcaatttt ctggggtttt gtttttttacc      840
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actgcagaac ctggaaaagc tgttgctgct attgatgcat aacatactgc tattggtctt      960
tttatataaa tatatatata tatatacata tatatatata atttgaattt ttggaaactt     1020
tagctgtgct gtcaactttg gaaaaagtat cccggtttac tgtgttgagt tggcattgta     1080
cagaaattaa cagccatatt ggtctagaaa cgttaaactt aatttttttt ccatttgtac     1140
aggggtaacg cactgtatta aatatgtaag gtcttatcta catgggtttg attacagaaa     1200
ctaataaagt attctctaaa taaaaaaaaa aaaaaaaaaa                          1240

<210> 594
<211> 1337
<212> DNA
<213> Homo sapiens

<400> 594
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ttgctgaatt ctgaactact gagaaagcac agagaattac aagcatcaac attattttaa      120
agtagaaaag ccaatgtagg aaatataaaa gctatgttac cgtgctcctt aaaatcagga      180
caaagttagt tccaaacatc atcctgtgtg ttattcaaaa aatctgatgc tctctgcaga      240
tctatgaagg agcaactggc tcaatttctc aaggtcactt ctagcttccg gctcctgctt      300
cttctaactt ggatgggttt ggggattgcc cccctgaccc tgtgctatac tgcaataacc      360
taaacaagga ctcagcagtt tcccttagtt ttcactgcag accacttatc aaaggcatgt      420
gtgtgcagga caggcttcac cgaaggtttg aggagccaga ggggtttaca ttgcaccttg      480
agctggaaaa gtaaaatatt ggcagtctcc gtccttcaaa aacagcaggt attttgtaac      540
tcaggctcct gccttctccc tgtagctcac cctttttttct tttcctcatt tctttraccc      600
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atagttcagc tatctccaag ctgaaccctt caacacagct gtggtcttcc tctgaatatt      720
agcagaagtt tcttattcaa aggcctcctc ccagaagaag tcagtgggaa gagatggcca      780
ggggaggaag tgggtttatt ttctgttgct attgatagtc attgtattac tagaaatgaa      840
ctgttgatga atagaatata ttcaggacaa tttggtcaat tccaatgcaa gtacggaaac      900
tgagttgtcc caaattgatg tgacagtcag gctgtttcat ctttttttgtt tattttcaat      960
gcctaataaa cagagatcct aaaaaaaaaa aaaaaaaact cgagagtact tctagagcgg     1020
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350

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ccgcgggccc atcgatttc caccctcggtg gggtaccagg taagtgtacc caattcgccc   1080
tatagtgagt cgtattacaa ttcactggcc gtcgttttac aacgtcgtga ctgggaaaac   1140
cctggcgtta cccaacttaa tcgccttgca gcacatcccc ctttcgccag ctggcgtaat   1200
agcgaagagg cccgcaccga tcgcccttcc caacagttgc gcagctgaat ggcgaatgga   1260
gatccaattt ttaagtgtat aatgtgttaa actactgatt cyaattgttt gtgtatttta   1320
gattcacagt cccaagg                                                   1337
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<210> 595
<211> 1337
<212> DNA
<213> Homo sapiens

<400> 595
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ttgctgaatt ctgaactact gagaaagcac agagaattac aagcatcaac attattttaa   120
agtagaaaag ccaatgtagg aaatataaaa gctatgttac cgtgctcctt aaaatcagga   180
caaagttagt tccaaacatc atcctgtgtg ttattcaaaa aatctgatgc tctctgcaga   240
tctatgaagg agcaactggc tcaatttctc aaggtcactt ctagcttccg gctcctgctt   300
cttctaactt ggatgggttt ggggattgcc cccctgaccc tgtgctatac tgcaataacc   360
taaacaagga ctcagcagtt tcccttagtt ttcactgcag accacttatc aaaggcatgt   420
gtgtgcagga caggcttcac cgaaggtttg aggagccaga ggggtttaca ttgcaccttg   480
agctggaaaa gtaaaatatt ggcagtctcc gtccttcaaa aacagcaggt attttgtaac   540
tcaggctcct gccttctccc tgtagctcac cctttttct tttcctcatt tctttracc   600
atccttccca aaggcaaaaa aataaaagcc agaaccactc tttccatttt attactcaga   660
atagttcagc tatctccaag ctgaaccctt caacacagct gtggtcttcc tctgaatatt   720
agcagaagtt tcttattcaa aggcctcctc ccagaagaag tcagtgggaa gagatggcca   780
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ctgttgatga atagaatata ttcaggacaa tttggtcaat tccaatgcaa gtacggaaac   900
tgagttgtcc caaattgatg tgacagtcag gctgtttcat ctttttgtt tattttcaat   960
gcctaataaa cagagatcct aaaaaaaaa aaaaaaaact cgagagtact tctagagcgg   1020
ccgcgggccc atcgatttc caccctcggtg gggtaccagg taagtgtacc caattcgccc   1080
tatagtgagt cgtattacaa ttcactggcc gtcgttttac aacgtcgtga ctgggaaaac   1140
cctggcgtta cccaacttaa tcgccttgca gcacatcccc ctttcgccag ctggcgtaat   1200
agcgaagagg cccgcaccga tcgcccttcc caacagttgc gcagctgaat ggcgaatgga   1260
gatccaattt ttaagtgtat aatgtgttaa actactgatt cyaattgttt gtgtatttta   1320
gattcacagt cccaagg                                                   1337
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<210> 596
<211> 1337
<212> DNA
<213> Homo sapiens

<400> 596
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ttgctgaatt ctgaactact gagaaagcac agagaattac aagcatcaac attattttaa   120
agtagaaaag ccaatgtagg aaatataaaa gctatgttac cgtgctcctt aaaatcagga   180
caaagttagt tccaaacatc atcctgtgtg ttattcaaaa aatctgatgc tctctgcaga   240
tctatgaagg agcaactggc tcaatttctc aaggtcactt ctagcttccg gctcctgctt   300
cttctaactt ggatgggttt ggggattgcc cccctgaccc tgtgctatac tgcaataacc   360
taaacaagga ctcagcagtt tcccttagtt ttcactgcag accacttatc aaaggcatgt   420
gtgtgcagga caggcttcac cgaaggtttg aggagccaga ggggtttaca ttgcaccttg   480
agctggaaaa gtaaaatatt ggcagtctcc gtccttcaaa aacagcaggt attttgtaac   540
tcaggctcct gccttctccc tgtagctcac cctttttct tttcctcatt tctttracc   600
atccttccca aaggcaaaaa aataaaagcc agaaccactc tttccatttt attactcaga   660
atagttcagc tatctccaag ctgaaccctt caacacagct gtggtcttcc tctgaatatt   720
agcagaagtt tcttattcaa aggcctcctc ccagaagaag tcagtgggaa gagatggcca   780
ggggaggaag tgggtttatt ttctgttgct attgatagtc attgtattac tagaaatgaa   840
ctgttgatga atagaatata ttcaggacaa tttggtcaat tccaatgcaa gtacggaaac   900
tgagttgtcc caaattgatg tgacagtcag gctgtttcat ctttttgtt tattttcaat   960
gcctaataaa cagagatcct aaaaaaaaa aaaaaaaact cgagagtact tctagagcgg   1020
ccgcgggccc atcgatttc caccctcggtg gggtaccagg taagtgtacc caattcgccc   1080
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351

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tatagtgagt cgtattacaa ttcactggcc gtcgttttac aacgtcgtga ctgggaaaac    1140
cctggcgtta cccaacttaa tcgccttgca gcacatcccc ctttcgccag ctggcgtaat    1200
agcgaagagg cccgcaccga tcgcccttcc caacagttgc gcagctgaat ggcgaatgga    1260
gatccaattt ttaagtgtat aatgtgttaa actactgatt cyaattgttt gtgtatttta    1320
gattcacagt cccaagg                                                   1337


<210> 597
<211> 1724
<212> DNA
<213> Homo sapiens


<400> 597
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ctgtgcccag cccctttgac attttaata gctcaacatt tattaaacct gtaagtggct     120
taaagtttca aaattctcca ttgtaagtca aaaaatgtct taagattttt atcccagact     180
tatgctaagg gttatgaatc tgttccacct tttgtttgaa atagccacct gtctgatttg     240
cttgtctatt tcttcaaaga actctgggga aaacagtatg atagagtagc aaggagttgg     300
tttttcaaat cagataaata tgtaataaaa ttccatttct acctctccta agacatgtaa     360
tttaacttca caaagcctca gtttcctcat ctaaaagatg aaaaaaataa aatctgtgca     420
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agagagagag agagatacac acatacctat gttcctcttt ccctctgaat ccacccagac     540
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tagcatgctt cttagcttta cttcttatga ccatgatgtc attatttgag aaatgttagt     660
ttcagtcaga tattctaagt tcttatgcat taatagttaa ttttttttctc tttgaagaat    720
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attcaagacc agcctaggca acataacaag aacctatctt tacaaaaaat taaaaagtta    1560
gccaggtgtg gtgacacaca cctgtagtcc tagctactcg agaggcttag gtgagaggat    1620
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ctaagtgaca gagcaagact tagtatctaa aaaaaaaaaa aaaa                     1724


<210> 598
<211> 1519
<212> DNA
<213> Homo sapiens


<400> 598
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tatatgtgcg gattatcgta aattagcaca ttgggccagt cagatctagt gaagagagga     180
aatcagagaa gggctagaac ttcagcagac cgtaatcaca aattctacta cagtgatgct     240
ggacttcttg aggtcccagt tgaaacttct cagctatctg cttttaggtt ttttattgtt     300
gagacagcga ggaataggta gaactagtga aattttgta aactcataat aataactttt      360
ctcaagcagg gttgatgtaa tttcaagtct gtcctgaggc tacaataagt ctgttgtaat     420
gaagggaaag caacaatttt actgtgcaga aagtattcat ccatttaaat gatcgtagct     480
cctgtattgt ggaactcact tggatgcagc tgtaaagata tgttttcctg acacccagaa     540
cgtatgtgat gcgagaggaa gacatcgagt gctaatttct tgatgtcacc atctccttgg     600
gaggaaacta gtataggatt taaaagaac ccttttatga actcatttgg tgaattagct      660
cccctaaaaa tgccaatgag aactaggggg tcatgggaag agtcgactaa tctttcaggg     720
atatggagtt tctgcctaga agtgggcaaa gactccatga gatgaagatc ttagttactg     780
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352

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aatggtcatt ttttaaattc aaaatcaata cctgttgaga taacagggaa actacatggt    840
ctgtcttgct gggcttattt cagcctttga gactggaata ataatgaggc agtgtactct    900
ttcaacattg cagaaatcta tttttacctc taaggtggac tggacctaga taacccctcc    960
ccccttagt gaaaatgtaa gtaatgaatt ctgtgattgt tgctaagctg acaagtcagg   1020
atcattcaca ttttaaaact tcatctttgt aaaactcaga aatggtgctt gttaacttga   1080
tgcacatatc tctctacttt agaagaaaga gcatccataa ttagactcct acttttttt    1140
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aaggtcctaa atagcctttc tgagcctcca gtttcccatc tgtaaaagag gtatactcca   1440
ctcttctggg agtgattgtg tgtcttaaat aagaaagtat ttgttttaa aaaaaaaaa   1500
aaaaagggc ggccgctcc                                                 1519
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<210> 599
<211> 1108
<212> DNA
<213> Homo sapiens

<400> 599
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ctgagctgcg gggccaggag ggaaagctga aggaggttgt gctgaagagc agcaaggtcg    180
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atgtcccagg cgtgtttgca gctggcgatg ctgtcacctt cccccttgcc tggaggaaca    360
accgcaaagt gaacattcca cattggcaga tggctcatgc tcargggcgc ktggcagccc    420
agaacatgtt ggcgcaggag gcggagatga gcactgtgcc ctacctctgg accgccatgt    480
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gggatctgga ggagctgaag tttgtggctt tttacactaa aggcgacgag gtgatcgccg    600
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ttgccatccs gaarcgggag ktggagactg gcgacatgtc ctggcttacg gggaaargat    720
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ctgcctcttc tccctctatt gggactggtc ccctgaagaa ccctgcaaca tgttagacat   1020
taccgtaaaa ttaaaacgca caaatttgca gaaaaaaaaa aaaaaaaaa aaaaaaaaa   1080
aaaaaaaaa aaaaaaagg gcggccgc                                        1108
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<210> 600
<211> 1579
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1388)
<223> n equals a,t,g, or c

<400> 600
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ggaggcggag ccgccgctct acccgatggc gggggctgcg gggccgcagg gcgacgagga    120
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caactacaac gaggaggagg aggagcgccg ctactaccgc cgcaagcgcc tgggcgtgct    240
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gctgtgggca tctacgccct ctttgtctcc accaactact gggagcgcta ctacacgctt    540
gtgccctcgg ctgtggccct gggcatggcc atcgtgcctc tttgggcttc catgggcaac    600
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tgggctgggg caacatcttc cagctgccct tcaagcacgt gcgtgactac cgcctgcgcc  1080
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<210> 601
<211> 1561
<212> DNA
<213> Homo sapiens

<400> 601
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cctgctcggg gtcccggacg ggcccgaggc cccgctggac gagctggtgg gcgcgtaccc   180
caactacaac gaggaggagg aggagcgccg ctactaccgc cgcaagcgcc tgggcgtgct   240
caagaacgtg ctggctgcca gcgccggggg catgctcacc tacggcgtct acctgggcct   300
cctgcagatg cagctgatcc tgcactacga cgagacctac cgcgaggtga gtatggcaa   360
catggggctg cccgacatcg acagcaaaat gctgatgggc atcaacgtga ctcccatcgc   420
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tacatcacca ggatggcgca gaagtaccat gagtactccc actacaagga gcaggatggg   660
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aagacaagga gagacaggac ttcatcttca ccatctacca ctggtggcag gctgtggcca  1500
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t                                                                  1561
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<210> 602
<211> 1581
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (466)
<223> n equals a,t,g, or c

354

<400> 602

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cctgctcggg gtcccggacg ggcccgaggc cccgctggac gagctggtgg gcgcgtaccc   180
caactacaac gaggaggagg aggagcgccg ctactaccgc cgcaagcgcc tgggcgtgct   240
caagaacgtg ctggctgcca gcgccggggg catgctcacc tacggcgtct acctgggcct   300
cctgcagatg cagctgatcc tgcactacga cgagacctac cgcgaggtga agtatggcaa   360
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tgtgccctcg gctgtggccc tgggcatggc catcgtgcct ctttgggctt ccatgggcaa   600
ctacatcacc aggatggcgc agaagtacca tgagtactcc cactacaagg agcaggatgg   660
gcaggggatg aagcagcggc ctccgcgggg ctcccacgcg ccctatctcc tggtcttcca   720
agccatcttc tacagcttct tccatctgag cttcgcctgc gcccagctgc ccatgattta   780
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ccacctcgtg cctttcttta tctacagcgg cttcgaggtg ctctttgcct gcactggtat  1140
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cgaagacaag gagagacagg acttcatctt caccatctac cactggtggc aggctgtggc  1500
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ggtgacgctg gtggcggmcg c                                           1581
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<210> 603
<211> 1960
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (256)
<223> n equals a,t,g, or c

<400> 603

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taagagacta ttttttggtgg cttttaacat atactttttt tgctttaatg ctacagttcc   180
tagtaatgtt gactaagtgt ggattttctt ttttaaaatc ctgtttggga tttattgtat   240
ttggattctg tgagtngttt tctcataaga tttggaaaaa ctctgcgttc tcttcttcag   300
ttactgcgtt ttgttttttgc cctccctctt ttgcaattct aattgaacgt agacctttt   360
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tgccttcaga ttatttcatt agaactatct gtcagtttcc taattctctt tttggctttg   480
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ccagcacttt gggaggccaa gagggggggat cacaaagtca ggagatcgag accatggcca   600
atatgatgaa accccgtctc tactaaaaat acaaaaagta gctgggtgtg gtggtgcgtg   660
cctgtaatcc tagctactcg ggaagctaag gcagagagaa ttgcttgaac cagggagttg   720
gagcttgcag tgagctgaga ttgcgccact gcactccagc ctggagacag agcgagactc   780
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tctggtaggt ctttttcaat atctaatgtt tcttttggtt cttttttcctt ctaccttgtt   960
gaattgtatg tttaggtttc ttttcttctt tataagtttg tatgtggaaa ttatgtggaa  1020
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gaccaccaaa atgacatgaa ttcaggctgc gaatccatgt gatttgatgg ctggttttta  1140
ataccagttt gtgagtggtg ctactttttca ccatcttaga gctaaggttt aaaatttaag  1200
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caaggtcacc tggtttagca aatgttttca aagtgaaagg tagcttcagt ctttagctta   1440
tcacataggg atcccttctt catttgatac tttgccttaa ccttgctttc ttaaccctta   1500
atgaccaact taaaatattt aaatatatgt aacaattgta aatatttaat atatgtaaaa   1560
gttgtaaata gttctgtggg gtggatactt agcctaccat gtttcctaca aaatgtgttt   1620
tttaatgcaa acttactacc cctttaaccc ttttaaggta gatctaccta tttcctcctt   1680
attgcttcca ctgtcttctt ggcttagctg tagtacaggg gatcctgtga atcatctttg   1740
aatccttgct ttgtatacag tggacattca aggaataaat cacaatggaa gattcttaat   1800
ttggactcca taatgtatat aaggaaatta acccagatta aaagatcaat tgcaaatcca   1860
gaaaaatatt ttcaaaaaat gggttaactg gtggattcat gtatgtatgt gtatacaaat   1920
tttttaacat gaaaatttat accgtaaaaa aaaaaaaaaa                         1960


<210> 604
<211> 1077
<212> DNA
<213> Homo sapiens

<400> 604
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ggtccgggcg tgcgggcggc gggctcgggc gcgggcggcg cggctcggc ggacagttgg     180
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agtgcggctt cagcaacgcc gtggtgcaga tcctgcggct gcacggcgtc cgcgattacg    300
cggcytacaa cgtgctggac gacccggagc tccgacaagg cattaaagac tattccaact    360
ggcccaccat cccgcaagtg tacctcaatg gcgagtttgt aggggggctgt gacattcttc    420
tgcagatgca ccagaatggg gacttggtgg aagaactgaa aaagctgggg atccactccg    480
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cagagaggga gccgttcatg tcagagactc actgccagaa aagccttacc cattttggtt    600
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cactgtaatg attcaatgct gtattatgat attgctgtaa acaaaattca ttcttatatt    780
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cccctctgca aatgtgtcag tctccaaaga gagtatctcc ccccaaattt tgtgtagctt    900
cttttgttat ggaaatggt ggacaaaaaa agaaactgtg ataactgggg cgttgttttt     960
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aaaaaraaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa      1077


<210> 605
<211> 2054
<212> DNA
<213> Homo sapiens

<400> 605
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cgcccacgcg tccggctccg aacaggaaga ggacgaaaaa aataaccgtc cgcgacgccg    120
agacaaaccg gacccgcaac caccatgaac agcaaaggtc aatatccaac acagccaacc    180
taccctgtgc agcctcctgg gaatccagta taccctcaga ccttgcatct tcctcaggct    240
ccaccctata ccgatgctcc acctgcctac tcagagctct atcgtccgag ctttgtgcac    300
ccaggggctg ccacagtccc caccatgtca gccgcatttc ctggagcctc tctgtatctt    360
cccatggccc agtctgtggc tgttgggcct ttaggttcca caatccccat ggcttattat    420
ccagtcggtc ccatctatcc acctggctcc acagtgctgg tggaaggagg gtatgatgca    480
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cctcccaatg ctgctcagct tgcagtcatg cagggagcca acgtcctcgt aactcagcgg    600
aagggggaact tcttcatggg tggttcagat ggtggctaca ccatctggtg aggaaccaag    660
gccacctttg tgccgggaaa gacatcacat accttcagca cttctcacaa tgtaactgct    720
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cctaaggatt ttcctttaat ttctctggag taatactgta ccatactggt ctttgctttt    960
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aaatggaacg cattagttgt ctgccttttc ctttccatcc cttgccccac ccatcccatc    1140
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aaaatgtaga ataaagacta ttttgaagat ttgaataaag tgatgaagtt gcattacaaa    1980
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    2040
aaaaaaaaaa aaaa                                                      2054


<210> 606
<211> 788
<212> DNA
<213> Homo sapiens


<400> 606
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cgccttcccg tacttctgtc ttccagtttt ccacttcaaa cttctatctt ctccaaattg    180
tttcatccta ccactcccaa ttaatctttc cattttcgtc tgcgtttagt aaatgcgtta    240
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ttcggtttaa tctcttttta aaagatcgcc ttcaaattat tttaatcacc tacaactttt    360
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atgaagaagc ttcatctcaa cctccgtcat gttttagaaa ccttttatct tttccttcct    540
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<210> 607
<211> 782
<212> DNA
<213> Homo sapiens


<400> 607
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cttctgtctt ccagttttcc acttcaaact tctatcttct ccaaattgtt tcatcctacc    180
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cttttaaaaa gatcgccttc aaattatttt aatcacctac aactttaaa ctaaactta    360
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taacgctaag caatatctta gtaacctatt gactatattt tttaagtagt tgtattaatc    660
tctatctttc aaagagaaaa aaacttatct gcggtttcct caagtccgcc tgccccctca    720
gcagaagccc ctgcgctggc tgcctcaatg cctcccttc tgtcgtcttc tcgcagccgt    780
ag                                                                    782
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357

<210> 608
<211> 1387
<212> DNA
<213> Homo sapiens

<400> 608
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acctggcttc tgcttttgag caacgagaag tgcttatgag aggtggcatg tggggctgca     180
ggaggaaggg agcacacagg atagctttct gctttgtgtg acttctccag cagaggctgc     240
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tgacctggct ctgggctctg gcaacaccac tactttcttt tttctctctc tgctgttgtt     360
aatctctggg ttgcctccct atctcctgtt ccgcttccaa ctcttccatc acctatgtaa     420
ctaattccct gcattgattc ctgtctccgc ctccccacat tttaaaaaat agactgtttt     480
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aaaaggcctt ccagcattcc tcttgacgct gtttgacaga attcctgcca gctcagctcc     780
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agactgccca gcacataatg aataaataag aaaatgagtg aggagttatt aacatcattt    1140
ggaaaaaaga tttcccattc acttgatatt gtttgttcac tcatttagtc attaaaagtg    1200
agattaataa aatctgaaaa tgttatataa taactttaaa aagccaggta attaataatc    1260
tgcactgata ttacatccac agtaccacag tatttatgtg tatgaattaa ggattaaaag    1320
ataatgtgga taaataaact attgatctat gtctgtgtag aaaaaaaaaa aaaaaaaaaa    1380
aaaaaaa                                                              1387
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<210> 609
<211> 545
<212> DNA
<213> Homo sapiens

<400> 609
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ggcacgagcc gggagatgcc agccttggat ttggcatgag ggtgagtgtc tctcaagggg      60
cggactgggt ggctgggaga ccaggacctg ggaatggcct ggccacagcc tggggtcctg     120
cagctcctcc cagaggccac ttataagcag ccctgccatg tggccacaca gcactggtca     180
tgccataccc atgcacagtc atacatgtcc acacacacat gcacacgtgt gcccaaacat     240
gcatgcacat atatggccgt acttatacat gtgtgcacac atacacatgc atctatgcac     300
atacatgccc atacacacgc acacacatac acacgcacac acacatcaac cccagagtca     360
ttcgttctgt ggagggacaa gtggactcag ggcagcgcca ggctgaccac agcacagcca     420
acacgcacct gcctcaggac tgcgacgaaa ccggtggggc tggttctgta attgtgtgtg     480
atgtgaagcc aattcagaca ggcaaataaa agtgaccttt tacactgaaa aaaaaaaaaa     540
aaaaa                                                                 545
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<210> 610
<211> 924
<212> DNA
<213> Homo sapiens

<400> 610
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agggaaatat taaacagaga ttgtgtctct ttttcttttg gttccataag aaacgaaaag      60
aactgagaga ttgtatcttt aatacgaata cagtactagt tcatgatgtt ttaragarttt     120
ggttgattct tgcttaatta aaaaatattt acagttgcag ttttatttaa cagctctgca     180
ttctcttctg ggtgtgcaag tgctgataca aacagatcaa ttagaatggc cccaataatg     240
aggcttttgg aagccatctt tatgacagct attgttccca gtgttttgca actatgaact     300
tatataaccc tcatcacaac cctatgaggt agatactcta aatattttac ccacttcaga     360
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358

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tggagaaact gaagcagaaa gaggttaata ggtactacat ggcagaactg agggattcac      420
atccccgcaa atgactccag tgcccactta actaccaagc tatactggct ttctcattag      480
tttgataggt tttttaaatg gttactttat atacaagctt cattaaatag aaatttcatt      540
aaatagaaac ctgtaattcc agtgtaccta gaatgtaccc tgcagggttt atcaaggaag      600
ttggttaaaa aaataatcat ttaggccggg tgcagtggct tacacctgta atcccagcac      660
tttgggaggc tgaggtgggc ggatcacaaa gtcaggagat cgagaccatc ctggctaaca      720
tggtgaaacc ctgtctctac taaaaataca aaaattagct gggcgttgtg gtgggcgcct      780
gcagtcccag ctactcagga ggctgaggca ggagaatggc atgagcccag gaggcaaagc      840
ttgcagtgag ccaagatcac gccactgcac tccagcctgg caacagagc gagactcctt      900
ctaaaaaaaa aaaaaaaaac tcga                                            924

<210> 611
<211> 1433
<212> DNA
<213> Homo sapiens

<400> 611
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taactaaata ttaaagtcaa aagggaattt attgcccagg ccctagaat tcattcttcc      120
tcaagactta aaatcaaatg aactgcttgt ttcctccagg caagagtatt aagaaataac      180
caggctagta tttttgataaa ccacaatcac ttaccttgta aacttgtgtt ttttctctca      240
gacaagtttt ggtattgtcg gctttcgcca aatcacaaag tcctgcatta cggagactta      300
gaagagagtc ctcagggaga agtgccccac gattccttgc aggacaaacg taagtagctc      360
tccttggcag aggcctgagt ggtggtcggt tggttgtttc ctagtcacaa tatatcacgc      420
aacagaacta tcagcctaag taagcccttt gaacacatct catctagttg taagtcgtcg      480
cctgagccat ctcatcaagt acaagacctg gatggacttg gggtttggaa ctgaataggg      540
gagaatgtaa aatggatgca aaggtatctt aattgaaaga cgtaaactgg gggttcaaat      600
gtccactttt tacattattt atccaggtgc tgtgtcaagg agcaaaaaca atacaaacct      660
gattctgtca gctgtctttt tctgaaaacc caaataatt tcttatttc gtaacttata       720
tgcctgaccc ctacaacatt tattccttac aatttagtgt atcccatagt tatgacacag      780
agttaatggc agagccaaat atagctagtt tacctcaaag acactttgaa aatgatgatc      840
cgttacctct actgtttgct aaatatttct cttgtatatt ttttggcttt ttctatatgt      900
tgtctgtttt aacatacatg cttttgaaga gacagtaatg tgcaggattc ttttagcccc      960
acagggaacc aggtgccagg ttgacagtgt taacaataca aattaaacaa atttgcccac     1020
agaaccctct aaatcccctt gtaaatttaa ctgttagtcc aaagaggaac agctctttgg     1080
acactaggaa aaaaccttgt agagagagta aaaaatttaa cacccatagt aggcctaaaa     1140
gcagccacca attaagaaag cgttcaagct caacacccac tacctaaaaa atcccaaaca     1200
tataactgaa ctcctcacac ccaattggac caatctatca ccctatagaa gaactaatgt     1260
tagtataagt aacatgaaaa cattctcctc cgcataagcc tgcgtcagat taaaacactg     1320
aactgacaat taacagccca atatctacaa tcaaccaaca agtcattatt accctcactg     1380
tcaacccaac acaggcatgc tcataaggaa aggttaaaaa aaaaaaaaaa aaa           1433

<210> 612
<211> 477
<212> DNA
<213> Homo sapiens

<400> 612
ggcacgaggt tttacttaat accttcattg tcctttaagt attcggaatg agaattacag       60
tgcttcattc agcataagac ttttgttcat gctgtttctt tggcctgaaa tatctatccc      120
ttcccaattg cctaattaat tcctatttgt ctttcagatc ttagctagtt catcacttcc      180
tcagggaaac attccctaat ttctgtcaca gagtaagacc cgttgttata cgtctcacct      240
gaccatgtac ctctacttag catttaacac gtgtaatttt gtatgtattg gtttgattaa      300
tgtcagaacc actagattgt aaactccatg aggaccggaa ttttgtttct gtcattgtca      360
ttgttcaact ttgtattttt tatgcctcat acagtgcctg cacatagta ggtgctcaat       420
taactttatt gaaagaataa aatgaatgga tgaggtataa aaaaaaaaa aaaaaa          477

<210> 613
<211> 1857
<212> DNA
<213> Homo sapiens
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359

<220>
<221> SITE
<222> (1808)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1822)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1855)
<223> n equals a,t,g, or c

<400> 613
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aatgttcaaa ataagttata taatgggtaa taattttag atttcttaga taagttacac        60
atycccagga tgaggtgaac tttcaaatat caattttaag gctattgatt atattgggaa       120
aaatgaacaa tgacttggat gttaatgtgt gtgttttcct tttttaaggg tatgccttt        180
tctgtgtatg ggaatgcaat gattcctcca gtagcaccta tccctgatgg tgctggagga       240
cccatattta atggccctca tgctgcagac ccttcttgga actcactgat aaagatggtt       300
tccagctcca cggaaaataa tggccctcaa acggtgtgga ctggaccctg ggcacctcac       360
atgaacagtg tgcatatgaa ccagcttggc tgatgaggat cagcttgtta gcctgcagat       420
tccttttcat ttggaggaaa tcacaagtgg ccgaaaaaaa aaattatgct cccaaatcat       480
tctactgatg tgcttgactg aagtgtgtag gcttttttgca gaagatctta ctaactgacc      540
tattttctgt gaacatttgt gactgcccat tccccatcat catccgtttt accttagtta       600
gcattttct tatcattttt ctttttttct ttccctcttc cccttttggac ataactttct       660
gttgaagctg ttctttggct ggttggtttt agtactgtaa actgcttctg agcaaacacg       720
gaaatttagc aaaattatgt aaacttgatc ctgaagtttt agaatggcaa ataaatgtac       780
aattgtttac ataacagaaa aggctaagca gaaagtaaat ttcaatatgt cagtatagag       840
gctctacttt atgtagactt aaattaatgt gagatatgta ccttcatatt cagaaatctg       900
gatgtttcct tcatacatta aactattaat aagcataact tttctactgg tgtaatttaa       960
gtataaagta aaataatggg cattatcatt ggatgtttcc ccacattggc ttttaaaata      1020
cccatcttgc tttcttttg gtttatttgt agcaaggcac atatagaaga agaaatttct       1080
ggcttttcca tgttgttta ttacctttc tcacttttaa aactaataca gacttatctc        1140
ctcactcctt tttctctcct tacctttacc actaatacca gtaaaattat ctttctgata      1200
gtgaaaaggt tctgtcaaga ttttcactgt aatggctgct acagagatgg accatcttca      1260
tcatcaccag tggtttcttc taattataaa atgtttaaac tttctgagaa tttaaaaagc      1320
caccactgtt cccagtcagc atatacaagc tcttaatatt ctgtttatta ataattcaa       1380
tgtactattt tatattggat gatattgatt cttaacattg gcttttcagt catcaacagt      1440
caacataaaa atttcaattt tcagtaattt agtggaaaat atcttatttc ttttttcaat      1500
tttaaaggct tcctgctttt ttacccttgt atattatcag tgaaaggat caacagttaa       1560
tttgagccaa gtaataaaag aaattctgca tttgtcacga agacaattta tggtagacag      1620
ataaatacac agattacagt gtaaagtctc catttaacct gtttataaaa gatacaaggc      1680
cacactaaac tactcagtgg gatttatata ttccatccac ttgaaacaat aaacagtaat      1740
gtatccaaga agattatgtg tcctaccctg tctcatggaa aaattaatta tatggttgaa      1800
atgtaaanga aagtgaagca tnaaaaatcg ggtgatgtat tatgatccat ttgtntt         1857
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<210> 614
<211> 1267
<212> DNA
<213> Homo sapiens

<400> 614
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ccacgcgtcc gctgtttact gatatctcat gcaatagaag ccctgatttt ggatccagaa        60
tcagcaagtt tccaggaata tggatctact ggaacagccc atgctgatag tgaatatgaa       120
agaagaatga tgtctgtata taatcatgtc ttggaggagg tagaatcact caatcggaaa       180
tataccccctg tttcttatat gcacacagca tgcctctgta atgccatcat tgctttgctg      240
aaagttcccc tttctttcca gagatatttt tttccagaaa ctacagtcta ccagcatcaa       300
gcttgctctg tcaccatcgc cccggaatcc tgcagagccc attgctgtcc agaataacca      360
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360

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gcagctggcg ctaaaggtag agggagtggt tcagcacgga tctaaaccag gactcttccg    420
caaaattcag tctgtctgtc tgaatgtttc ttccacactg cagagtaaat ctggacaaga    480
ctacaagata cccattgaca acatgaccaa tgagatggag caaagggttg aacctcataa    540
tgattacttc agtactcaat ttctgttgaa ctttgctatc cttggaacac acaacattac    600
agtggaatct tctgtgaaag atgccaatgg tatagtatgg aagactggtc ccagaactac    660
catatttgta aaatccctgg aagaccctta ttcccagcaa attcgcttac aacagcagca    720
agcccagcag ccattacagc agcagcagca acgcaatgcc tacacacggt tttaaccatg    780
gaatgaatgc actgcagact ctcaagagat caatcaaatt gccagaaaca gtttggtttt    840
tcatatggaa taagtattaa agttacagtg tagttcattt attcattgat ttttgtaatg    900
taatattctg gaaaaaattt tgttttctta aaaatttgt ctgacagctg gcgtggttg    960
ctcacgcctg taatcccagc actttgggag gctgaggtgg cggctcacg aggagatcaa   1020
gaccatcctg gctaacacag tgaaaccccg tctccactaa aaaatacaaa aaaattagcc   1080
gagcatggtg gcaggcgcct gtagtcccag ctacttggga ggctgaggca ggagaatggt   1140
gtgaacctgg gaggcggagc ttgcagtgag ccgagactgt gctccagcct gggcgacaga   1200
gcgagactcc gtctcaaaaa aataaataaa tacattttgt ctgaaaaaa aaaaaaaaa   1260
aaaaaaa                                                             1267


<210> 615
<211> 915
<212> DNA
<213> Homo sapiens

<400> 615
gaaagatcag agagaagtcc agagccttgc ctgcttgtga tcctggtgga gaaggtggag     60
tatggtgagc tgcttgctaa ggacagccag gcaacactgt gtttgtgaag atgtgctcca    120
ccttctcctc tgtgcatccc agctcctcct gctgaaacag ctgagcttgc tttttggatt    180
tcttagactc ctggcctctg agagacacct ctaaggacaa actgaccttg cattgggaac    240
tttattatcc agatcctcat aggctttgtc tactctggat tgcttgttgc aacagttctt    300
aggaagcaag attgtctcct gcaccagcat ctgcctgtgt ttgcttttac ctactttgag    360
caagacccag tgaggcccta gctctgttgg tcctgaaaag cctgaaccct gaggctgttt    420
ctcctgcctc caaaatgcaa ttataggaaa taagaagcac agaaacagtg gaaacaacca    480
ggaggagaaa caagaaaacc taaaatttttc aatattcaaa aatacctgtc gtggtggttg    540
atgcagaaaa cactgagttc atcaaagagc tttgtaattg ttggaccaga gaaccccttt    600
gctacaggaa ctgatatgtt ttgtctttct ggcctagtca agggaggata agtaagtatc    660
tggggcatgg aaggaatgca ctcttgggct gtttttgcttg tatctgactc acccctgact    720
ctccagtgaa gcagaaagga agaaacctca caccacccag gtgtggccag actttggcca    780
ttattgtgaa tccccaagag ttaccacagg cccttcccaa atatatattt aatcttgtgg    840
ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    900
aaaaaaaaaa aaaaa                                                     915


<210> 616
<211> 1358
<212> DNA
<213> Homo sapiens

<400> 616
gcccacgcgt ccggaggggg tgtccggtcc tgcccatccg atactctggt ggaaatgtgg     60
ctctttgcag catgtacgtt tctccctgat tttkgttgat gcatatttcc ccgtttaagt    120
agccgttagg gcgcagtatc ggcagcttga cacccaccaa gcaaaagttt cagcctggaa    180
aaaaaatggg ggggaagggt ggatgaaaag gagggagaga aggtggaaat ggttttttttt    240
ttttttttttc tattttcttt cttttttttt ttttttttttt ttggtcaaca gccgttttttc    300
tagttccaag ttttaaatac atggaaggaa gtccgggaga accatatgaa ggagcaggag    360
gagaggaaga aactttttttt ccttcttttc caggagtagc tggaaattaa gatcgggttc    420
cttttctgcc agcttggaag ggcaacccca tgactgattg cgattctgag gatgtctatg    480
caaagttgga ttcttgttac agtgtatcca atctgaagta ttgcacatct gaactgggac    540
tgttaacact gatgccaata cagtgtgggg tgccagaaag tgtctgctga tatttgtgga    600
aaaaaaatct attttgttta cctactgtat caaaggggag tctggggggag aatggtagta    660
ttttttttttt ttatcagctg tgaaaaaaat gttacagatc tgcacatttt cgtgtgtact    720
atggtgtgtg tgtgtatgtg tgtggtgtgt gtgtgtttta agtttagcct tttgttttttg    780
tttttttggtt ggcagtaacc gattttaatg actagctttt aaaaatacag tacaaagact    840
ttgtaaatgt gattcagggc ccccagcacc cctgtgtctg cagagtgcct tcaaaactca    900
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361

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gctgttccag ccggtgccaa cctgtgaact tcccaccata tcccagaatc tgctattccc      960
caaaccactt cccagtttcc tttcagtaat ctttctgaag gagccaggac aatagggcct     1020
gttgtttagt gaatttcttt attattttca gcctttaaaa tgtaatttcc atctcttgca     1080
atgaatttgt ttcccttttt tttgcttcat tttgtttaaa ttttcaggta tttagctccc     1140
ctttcatatt attttaaat ttttaatta cctgttgtag ggtgttcctc cagaagcaaa       1200
gagcaaaatt ttactgttgt gatgtaccaa ttctaactaa ttgtaatttt taatttcatg     1260
cgtttaatca ttgtctcttc attttaagac ttttaataca aatgtcattt ttaaagaaac     1320
aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gcggccgc                             1358

<210> 617
<211> 1335
<212> DNA
<213> Homo sapiens

<400> 617
ccacgcgtcc gcgacccacg cgtccggtca aggacaagtg ccttctaagg catggataag      60
ggctttcttc ttatgaaaaa gtctagactg tcttactgtg aagatggcca gggaggatag     120
caagcaatgg cattcttgaa cagtctaagg caggtttctc agtgtggtcc tgagaacaga     180
agcatctgca tcacctggga atgtattaga aatgcaagtt cccagcccca tcccagacct     240
actgaatcag aaactctggg ggcgagggct gaaacctgct ttcataagcc cttcaggcga     300
tactgatgta aactaaagct taaaaaccac cgttttactg tgacttcatg aagaatataa     360
ttgcaatatc acctaaattt ttatcctggc tgggatgggg cagattctta ctatggacaa     420
tttctggaac ttacagtatg aagagcagat gaggagtttg agacaaagaa aaaattgtac     480
agggagttta gtgaattttc catcaggttg gccattactt tctttctcta aagtctcagg     540
atgtctggaa gcaaggaaag acaaaagact tgaagcaccg ggtgcatgct gtgtgtcaca     600
agtgaggtgg agagttggct gtggaaagta cagcaattcc tctggaatta aatgaccgac     660
caacacagta ccaagaggat gaagagaaga tgttttgcgt tgctacatga atcatggatg     720
actcatattt cacttgcata tgaaatataa ggcagttaac atcttgtttg tggcttaagc     780
aaggacatta atcctactag atgaagggga agttggttct gttgtcttaa gggatgcccc     840
cttgtgattt tggtcaactg aatgaaaag aaaagatagc cttggacctt ttttcatgg      900
gaggtttgga ggtcaagcat gtagaaggaa aaggctgtag tcatgaatat agaactgtct     960
gctctccacc ttttcctcac tctacattta gtcatcacac tgaacaggat gtggcctgct    1020
gacagtgagt agctgaagtg cctgtttggt aagtaggtta gcattcatca tgaactctga    1080
aagccatttc agagtttggc tgctgctctg accctgctgt ggtacaaaaa acatggattt    1140
tttgtttttt taactggagt aataccaaat tcccttttaga agcttgaagt ttgatactat   1200
tgctttcccc attataagga ttatacagta ttaattaatt ataaggccca aagtttgttt    1260
tggcaaataa agtattattc tctatcatca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    1320
aaaaaaaaaa aaaaa                                                     1335

<210> 618
<211> 932
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<400> 618
tcgacccacg cgtccgcggn acggtggnct tggttgtcaa tgaagacaac ctggtacctg      60
caggatgctg gcagtgcctt gtccctgggg gtgagttgtg acaaatgctg tgttctctat     120
tgttactttt tctccttctg tttgtcattc cgaagtcgcc ctggcagcat acaagtggct     180
ggtttgctac ctgctccgag agacttatca aaaattaaac caagagaaaa gatcaggaag     240
cagtgacttt gaagcaagga acaaatgcca ggtgtcccac ggccgtccgt tggcgctggc     300
cttcgtggag ctcacggtgg tccagaggtt ccacgagcac gtgcaccagc cttccgtgcc     360
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362

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gccctcgctg cgggccgtgc tggggcggct cagtgctctg tacgccctgt ggtccctgag    420
ccgccacgcg gccctgctct accgaggagg atacttctcc ggtgagcagg cgggagaagt    480
gttggagagc gccgtcctgg ctttgtgttc ccagctgaaa gacgatgcag ttgccctggt    540
agacgtgatc gctcctcctg actttgttct ggactcaccg attggcagag ccgacggcga    600
gaacacaccg gagattgctg ctgctttctg agcccgcacc tgtgcgccta aactgctgat    660
tggcctcaac tgcccaggcg gacgggaggg aggcacccgg ccggctggac taatctggga    720
tcgcggtgat ttgcagcgtg gaaaagaaat gcagatgatc atgtctacct gatgcgctgt    780
gggttttttg ataattagaa tttcgcacat tcagttttca gggttcagct cctttctcta    840
aagtaaacag cccattgtca gggatcttct ggtcagaaaa aaaaaaaaaa aaaaaaaaaa    900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                                  932


<210> 619
<211> 697
<212> DNA
<213> Homo sapiens

<400> 619
aaacttgctg gctatatatc cagcctgctc accctggcag gctttgctac agctatggct     60
gctgttgtcc tctgcgtgaa tagcttcatc tggcaaactg aacccttttt atacatcgac    120
actgtgtgtg atcgctcaga ccctgtcttc cctaccactg ggtacagatg gatgcggcga    180
agtcaagaga accaatggca gaaggaggag tgtagagctt acatgcagat gctgaggaag    240
ttgttcacag caatccgtgc cctgttcctg gctgtctgtg tcttgaaggt cattgtgtcc    300
ttggtttcct tgggagtagg tcttcgaaac ttgtgtggcc agagctccca gccctgaat     360
gaggaaggat cagagaagag gctactgggg gagaattcag tgcccccttc gccctctagg    420
gagcagacct ccactgccat tgtcctgtga gctgccaaag accccacggg gtgcccgcat    480
gtccctgtct agggcagccc agggccccca ctcctggctc ctcacacttg cctcccctat    540
ggccgctctc cagaccctcc tcctttcttc tccccacatc cgcacctgct gttcccactc    600
tggggttctc aagtccatga acagatattg ttgcattttc cacaatgctg attaaacata    660
ataaacaatc cagaaaagca aaaaaaaaaa aaaaaaa                             697


<210> 620
<211> 611
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (33)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (48)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (80)
<223> n equals a,t,g, or c

<400> 620
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cggttccgga attcccgggn tcgacccaag cgtccggcgt gggaaagatc tgacagtaga    120
gatctgagag gctgtctgtg tgaaggctga atttcatgaa ctatctcatt gttgggatgg    180
ttccctttca gcctcgtgcg aacaagatga attagataat tgtataattc cttggagctc    240
tgaaattcta ctgcacaaat agatgcctcg tgatcgctgt tgagatgagg tcttccagag    300
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cctgtgatcc cagatgtgat tgatcatctt gccagagctt tagccacctt ctcacctgtt    360
agacaattcc tgcccctgtg tctctactgt atcgcctttc acagctcata tgctgcacct    420
atgcagtctt cttcagggtg tcctggggaa gtgtcgctac gtttactatg ggaaaaactc    480
agagggcaac aggtttatcc gagatgacca gctctgaagc caacttctgt ataccttcac    540
ccatttcatg aaaataaaat caaaagggaa atcaaaaata aagaaacgc taaagaaaaa    600
aaaaaaaaaa a                                                         611


<210> 621
<211> 676
<212> DNA
<213> Homo sapiens


<400> 621
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gtggagtacg gtgtactggc ccagcttaca gatgcagaaa gcgagacgtt ctgccatcag    300
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gaagagggca gcagttggca gtagctgccg atgtctgtcc ccagctccac cattcctccc    420
tgtggctgtg ccatgctcgt ggtttcagtg tccgtgtgtc catgtgtctg cccttcagga    480
gctcgcagct ggtgtgcttg gcggtcccag gcctgtgtag tgtctctccc ctgctgcggg    540
cgcccccacc ccgattcctc tccccagaag cggtgggatg ggcccccatg aactgcagca    600
gcatgctgag gtgtccatgt tgtctgcctt tgtataaaga aacagcctct gacctgcaaa    660
aaaaaaaaaa aaaaaa                                                    676


<210> 622
<211> 572
<212> DNA
<213> Homo sapiens


<400> 622
ccacgcgtcc ggaaatacat gcatagctgc agaaaccatg ataggtagag gacttttctt     60
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acaaagaaaa aaattccagt gaattgtgca gaaatgctgg tttttacacc atcctaaaga    180
aaaacttttac aagggtgttt tggagtagaa aaaaggttat aaagttggaa tcttaaattg    240
taaaattaac cattgagtgt caaagttcta aaagcagaac tcattttgtg caatgaacat    300
aaggaaagac tactgtatag gttttttttt tttttttctc cttttaaatg aagaaaagct    360
ttgcttaagg gttgcatact tttattggag taaatctgaa tgatcctact cctttggagt    420
aaaactagtg cttaccagtt tccaattgta tttagcttct ggttggaatt tgaaaaaaaa    480
agaaaaaaag aaaaagaaaa cctaaataaa ataggtgaaa gttccctgac tattcaggtg    540
atacacaaaa aaaaaaaaa aaaaaaaaa aa                                    572


<210> 623
<211> 2235
<212> DNA
<213> Homo sapiens


<400> 623
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aggaagaaaa aaacagattt acaccacaga tagtgatgag atttcacata ttgttaatcg    180
tattgctcct caggatgaaa aaccaacaac aaattctatg ctggacatgt ggattggtga    240
aactgctatt ccttgtactc ccagtgtagc aaaaggaaaa tcaagagcaa aaatcagctg    300
cacaaagtta aaaacacaaa gtcaagaaga agaacttatg aaactggcta aacaatttga    360
taaaaatatg gaagagctag atgtgattca agagcaaaac aagaggaatt atgattttac    420
ccagatgatt tcagaaacag agattttaag taattataaa gataatatac agatgtggtc    480
attacataat atagttcccg aaatagataa tgctacaaaa aagccaatca aaggaaacac    540
caagatatct gtggcaaata atcaaaatag cagtcagaag ccatttgacc aaattgctga    600
agcagccttt aatgctattt ttgatggttc tactcagaaa tgtagcggac agttaagcca    660
agaactgcca gaggcttttt ggagcaccag taatactacc tttgtaaaga caaatgcttt    720
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364

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gaaagaggag aaaatcatta ctaatgaaac tctggtcatt gaaaaactgt caaataaaac        780
cccacgatca ctttcttctc aagtagatac acccataatg acaaaatcat gtgtgacttc        840
ctgtactaag gagccagaaa cttctaataa gtacattgat gcatttacta caagtgattt        900
tgaggatgat tgggaaaact tactaggtaa tgaacctttt gctatgcaaa atatcgacat        960
gcctgaactc tttccttcta aaacagccca tgttactgat caaaaggaaa tttgtacctt       1020
taatagtaaa actgttaaaa atacgtcaag agcaaataca agtccagatg ccaggttagg       1080
agattcaaaa gtattacaag atctttcttc aaagacatat gacagagaat taatagatgc       1140
agaatataga ttttcacccca aattcaaata aaatcwcaac aaattatcca ctggaaaatr       1200
aaratgaaaa tttgaggaac tgtwtccaaa taaaactaag rtattcargg acraaaatty       1260
aaawatgtat akctamgatc tmaawctgtc agataaataa tmtgsatgwg tmttcwtact       1320
aacwctrmtg gatkcywatr caagtgaata gttccaaatt ggttctttca ggaagttcaa       1380
gtttgaatgt aacttcagat catatgaata cagaaattac tacttataag aagaaattga       1440
gtactaatca gccatgccat aagactgtaa cagatgaagc tcagagcaac cttaacacaa       1500
cagttggatt ttcaaagttt acatttacaa ggatgaaaaa ttctcagatt ctttctcagt       1560
ttaatcaaaa ttgtataact ggaagtatgt ctgataccaa aattacacag ggtgtggaga       1620
aaaagaaagg tgtcaaccca ttactggagg aagctgttgg acagcaatct ttggtgaaac       1680
tttctgaatc tttgaaacaa tcttcaaaag aggaagaaga gaaaaataga aagtgttctc       1740
ctgaagaaat tcagagaaaa agacaagaag cactggttcg gagaatggct aaagcacgag       1800
cctcatctgt aaatgcagct cccacttcat ttctttaatg aaatattagt tggaagactt       1860
cacaaagact gctgataact atctgtgatt gataggaaat ttttttttctt gatttctctg       1920
tgagaaatgt aatgctgact tttataaagc ctggacttct actttatttа ataaatcaat       1980
gtttgcaatg gtaaatgaac catttccttg gacatgtatt tgaaagtcat taaatacaaa       2040
agttttggaa attcaggaaa gttagcaatt atgtacggat attatacaga ggaaagtagt       2100
tatattttta aatgctatta ttgcagagga tcatcaaaaa agaggtaatc tacgttatttt      2160
cctattctaa tgtctttttcc taataaaaaa cttcaacttt ctaagttaaa aaaaaaaaaa       2220
aaaaaaaaaa aaagg                                                        2235
```

<210> 624
<211> 1476
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1417)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1438)
<223> n equals a,t,g, or c

<400> 624
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ctcctgggct taagcgatcc tcccacctca ccctgctgag tagctgggac cacaggcgca        120
cgccacgaca cttgacaatt ttatttttag taaagacagg gtcttggtat ttctggtctc        180
aaactctggc ttcaagcaat cctcctgcct cggcctccca aactgctggg attacaggca        240
tgagccacca tgcgcggcct tttttttttt tctctccttg ataaggtact ggcgarttgc        300
aactgtttgc tttcctatag cacagctgaa atgaaacagt cttttcmatg tacagattag        360
catcattacc tcaccaatca aaaatcccta ccttgarttg gtctttatat ttttctggga        420
rctttggccc ttgggatcct gcaacgccac aaagtatatt aacaaggaat tattattcta        480
attttaatga acggaatcta agaagttcag cgaggttcaa gggtaaaagc caaggaaagt        540
ttcctttgtg tttccttaat atcttgagtt cactgctttt taaactcctg ccacagtgca        600
caggggctag tgcacttcgt cttttctagat aaactgtacg ttcccgggag agcagagact        660
gactttcctt ccgcacccccc ggggcttagg tgcccagtaa aaacagactg aaggcaacgt        720
gggaccaggc ccggaatcca gagtttgtgt ctcctagtct aagggcctca cgttgtcctc        780
cacctgccct attcaccagc atcacattgg ggcatttcta attcagccac tgaggttatt        840
aatattttgt ttgcaggaga gaaagagtcc acttaattat agccttcagt aaaagaaaaa        900
cttttacacc gggaagatgg caagctggtg gtgttagaca gatttaagac tcaggaaaag        960
ggaagtgtgg ttttttccag gcatgcctgc ttgggattgg cccgtttacc tttcctgcgt       1020
ttgctctggg tgttgggatg kttcagcatt acatggtgaa acccatacga gggttacatg       1080
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365

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gtgctgtctg ggagctctgk gcccatctyc ataaatgaag gcctttcatc tccctactct   1140
gyccctgcat ccccaccccc aaacagacac agctggccaa tctctcgatc aatcctatca   1200
gaacttgagt tttttctctc cctgttcagt gatataacct cagctgggca tgcttattta   1260
atagtttatt taataattga gtaagaaaaa tggaaatatt agggttcatc aacccatgaa   1320
atggggggcta gcctgcarca tcaagtattt aaattacttg taatttaaga atttccttta   1380
accaacctct ggcaacccgt ctcccctccc cttcccncaa atatgtatat tattatgngt   1440
caattaaaaa taataaaaac ccaaaaattt cctccc                             1476


<210> 625
<211> 596
<212> DNA
<213> Homo sapiens


<400> 625
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acctaccgcg ttttcacaaa attacactat ccacctggta cctaagtctt gtcatggact   120
tacaggtttg catgggttcc aaatactggt ttatggtact gtttttggaa ctacttgtgg   180
gactatattt tggtgtggtg tttgggtagt gaagttagtt tgacatgaag ttttgcattg   240
aacagaaaag gaaacaggaa gaagatgaag aaaacaaacc taaggagaat tcggaactac   300
cagaggatga agatgaagag gagaatgatg aagatgtgga gcaagaagtt cccatagaac   360
ctcctagtgc aaccaccacc actacgattg gaatctctgc aacatctgca acattcacaa   420
atgtgtttgg gaaaaaaagg gccaatgtgg tgacaactcc cagcaccaat cggaaaaata   480
agaatgaaaa caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa       596


<210> 626
<211> 1735
<212> DNA
<213> Homo sapiens


<400> 626
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acatgggggtt cggagcgacc ttggccgttg gcctgaccat ctttgtgctg tctgtcgtca   120
ctatcatcat ctgcttcacc tgctcctgct gctgccttta caagacgtgc cgccgaccac   180
gtccctccaa gtgtgccgcc cagctaccct ggaccaagct accagggcta ccacaccatg   240
ccgcctcagc cagggatgcc agcagcaccc tacccaatgc agtacccacc accttaccca   300
gcccagccca tgggcccacc ggcctaccac gagaccctgg ctggaggagc agccgcgccc   360
tacccccgcca gccagcctcc ttacaacccg gcctacatgg atgccccgaa gcggccctct   420
gagcattccc tggcctctct ggctgccact tggttatgtt gtgtgtgtgc gtgagtggtg   480
tgcaggcgcg gttccttacg ccccatgtgt gctgtgtgtg tccaggcacg gttccttacg   540
ccccatgtgt gctgtgtgtg tcctgcctgt atatgtggct tcctctgatg ctgacaaggt   600
ggggaacaat ccttgccaga gtgggctggg accagacttt gttctcttcc tcacctgaaa   660
ttatgcttcc taaaatctca agccaaactc aaagaatggg gtggtggggg gcaccctgtg   720
aggtggcccc tgagaggtgg gggcctctcc agggcacatc tggagttctt ctccagctta   780
ccctaggggtg accaagtagg gcctgtcaca ccaggtggc gcagctttct gtgtgatgca   840
gatgtgtcct ggtttcggca gcgtagccag ctgctgcttg aggccatggc tcgtccccgg   900
agttggggggt acccgttgca gagccaggga catgatgcag gcgaagcttg ggatctggcc   960
aagttggact ttgatccttt gggcagatgt cccattgctc cctggagcct gtcatgcctg   1020
ttggggatca ggcagcctcc tgatgccaga acacctcagg cagagcccta ctcagctgta   1080
cctgtctgcc tggactgtcc cctgtccccg catctcccct gggaccagct ggagggccac   1140
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ccacaggtga gcagggctcc tgtccaccag cacactcagt tctcttccct gcagtgtttt   1260
cattttattt tagccaaaca ttttgcctgt tttctgtttc aaacatgata gttgatatga   1320
gactgaaacc cctgggttgt ggagggaaat tggctcagag atggacaacc tggcaactgt   1380
gagtccctgc ttccccgacac cagcctcatg gaatatgcaa caactcctgt accccagtcc   1440
acggtgttct ggcagcaggg acacctgggc caatgggcca tctggaccaa aggtgggggtg   1500
tggggcccctg gatggcagct ctggcccaga catgaatacc tcgtgttcct cctccctcta   1560
ttactgtttc accagagctg tcttagctca aatctgttgt gtttctgagt ctagggtctg   1620
tacacttgtt tataataaat gcaatcgttt ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa        1735
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366

<210> 627
<211> 1388
<212> DNA
<213> Homo sapiens

<400> 627
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gacgacttca actatggcag cagcgtggcc tccgccaccg tgcacatccg aatggccttt       120
ctgagaaaag tctacagcat tctttctctg caggttctct taactacagt gacttcaaca       180
gtttttttat actttgagtc tgtacggaca tttgtacatg agagtcctgc cttaattttg       240
ctgtttgccc tcggatctct gggtttgatt tttgcgttga ttttaaacag acataagtat       300
ccccttaacc tgtacctact ttttggattt acgctgttgg aagctctgac tgtggcagtt       360
gttgttactt tctatgatgt atatattatt ctgcaagctt tcatactgac tactacagta       420
ttttttggtt tgactgtgta tactctacaa tctaagaagg atttcagcaa atttggagca       480
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agtgagataa tggagttggt cttagccgct gcaggagccc ttcttttctg tggattcatc       600
atctatgaca cacactcact gatgcataaa ctgtcacctg aagagtacgt attagctgcc       660
atcagcctct acttggatat catcaatcta ttcctgcacc tgttacggtt tctggaagca       720
gttaataaaa agtaattaaa agtatctcag ctcaactgaa gaacaacaaa aaaaatttaa       780
cgagaaaaaa ggattaaagt aattggaagc agtatataga aactgtttca ttaagtaata       840
aagtttgaaa caatgattaa atactgttac aatctttatt tgtatcatat gtaattttga       900
gagctttaaa atcttactat tctttatgat acctcatttc taaatccttg atttaggatc       960
tcagttaaga gctatcaaaa ttctattaaa aatgcttttc tggctgggca cagtggctca      1020
cgcctgtaat cccaccactt tgggagaccg aggcaggtgg atcacgaggt caagaggttg      1080
agaccatcct ggccaacatg gtgaaacccc gtctctacta aaaatacaaa aattagctgg      1140
atgtggtggc acacacctgt agtcccagct agtcaagagg ctgaggccag agaatcgctt      1200
gaacctggga ggtggaggtt gcattgagcc aagatcacgc cactgcattc cagcctggtg      1260
acagagcgag actcagtctc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa      1320
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagggcg gccgctctag      1380
aggatccc                                                              1388
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<210> 628
<211> 887
<212> DNA
<213> Homo sapiens

<400> 628
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ggggctgaat ttggcataat tatacttgac tatactgtaa aagaaaccag atctaatata       120
aggacatcaa tacttagtta ttaattcatt tgcttatatt tatatgtcat ttgaaaatgt       180
gtattaacat acacaattaa agggatataa aaatgaacat gccctctcca tttctttaaa       240
agaaatcaag gctgaatcaa acaggactac tgttctgaaa gaatactcag actatgaggt       300
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gaaatttatt tcctagttct gtagaaatgg ttgtattaga tgttctctat catttaataa       540
tatacttgtg gactaaaaga tataagtgct gtataaaatc agccaattat gttaaactag       600
catatctgcc tttatgtgtt tgtcattagc ctgagtagaa aggcctttaa aatttttta        660
gaaagcattt gaatgcattt tgtttggtat tgtatttatt caataaagta tttaattagt       720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa       780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa       840
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<210> 629
<211> 804
<212> DNA
<213> Homo sapiens

<400> 629
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ggaactgcct tgtgagaagt ctgtattgta ccccatgtgg cctattgcca gccttactta        60
tatgggtaag cccttagctc tttgttcccc tgcctttctg ctttgccttg tgcatgcagt       120
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367

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gagttcccaa cagccttaac attctcaaca tcttcatcat ccagatgcta tgttgcatgt      180
ggtggttgag gttgtacaca gcaagactcc agatggagcc atccgcatgg taggtgagtg      240
gcatctccca aggtatgcaa agccatcatg ggagccctgc ctgtcctgca gacgtgaact      300
gggcatgcga tgcaggaggg cctagggtac cgctgctccc ggagctctgg agcactgatc      360
aggagtgtcg catgtgtccg gttgctttcg aatgcaggag gcgacaagta ctagtggctc      420
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aaaaacattc atatgtatag ttagaattga tttgtagggt ttttgaacga tgtaacttgg      540
gcaaaactga agttcttatt tttgttgttg ctaagagaca ataaagataa aaataaaata      600
aagattaaag ataaaagatt tggtatacaa ggagtataaa tatgaaatga gagggcattt      660
taaaaatgaa ttaataattt tgaaatatat gttaatactt gctgacttcc aaagtatcat      720
ctgtgataat ttatctcatt gtattccatt tcgttgtacc aaacatccta attgtttgga      780
aaaaaaaaaa aaaagggcgg ccgc                                            804


<210> 630
<211> 3264
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (36)
<223> n equals a,t,g, or c

<400> 630
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tgctgagtyt ggaaaagggg aggagaccct tgggaggact ccaggcagct gtgctcccag      120
ggctcatgtt ctctactgga ttagggatag gcacctctga aatctccacc ctgatgattg      180
gaatgaaacg gagtgaacat gagcccagct gagagaggag caggaatgtg tgaaaaacag      240
ctgctctcct tgtcccagct ttgtgattga gccctctgtc ttgctctctc tgccttccct      300
gtgtctttct tctcttacca gagcatctgt ttgcagaggt aacattacct tccccagcca      360
caggtatgtg gaatacggtg aggaaaaaaa aaattaaaaa aaaaatgcaa gctgtcagga      420
tgcttaagct ctttttcagac atctgcagtt tcatccctac cttgttcaca taccatccaa      480
gaggcacata ggctacccaa gagagccttg gattcagtgg tacactcctt gggcccaagg      540
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ggcctttgat gctttaattc ttcttcagtt cattaaaagt aactactaag gaaaggttaa      780
aaacttcccc tcaaaaagga atcaacccca ggaagtaatt atttacaacg attttcccaa      840
attttgtaca atctgtcctg gaaagcaaac cccttttaaa atctaatgtc tgggctttga      900
gtattagctc atttagggtg gacaaatgca ttactgtttt caaactgctc acatttattc      960
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gcccagttcc caaatcaatt ataggtacct gtttaggaga gaggaagatt ttacctctca     1140
aagggtgaga tttgaaattt acactaaaaa gacaacttta catttaatgc ttcacttaat     1200
gagacattct ttttttttata agtctatttt tctactcagt ttcagaacac taatctgatt     1260
ttcactctga tttttaacgt ttctttaaat atttataatg tagcttcttt caaaatattt     1320
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attatttagt actgaaacat gctctttttac ctaacagtaa acaagtatgt tttgatatat     1440
atctgttaat atgcttatag tggtaagaaa tggacttgag gtcccaggag atttcatttt     1500
attcaccctg gtcagataca ataaaggcta tgagtataaa tacataactt cctaaccagg     1560
tgtagggcat gttcatgaat atcaaatctt ttgatgctgg acccaagaga ggaaaagttg     1620
tagctaaatg ttgatttact tataactaga cgtctatgtg agaaaatata tgtatacata     1680
tatatgatat gcagaagtca cttttttttat caggctttat tctccttaca aagccacagt     1740
ttaactgtct gcaacagttg gtttatgtta atgatagaca aatacccagt gtttgttact     1800
ttttccaact accactgtaa tgataatctt tctcacgtat atacatgcaa cttcttggct     1860
tcatttccat gaagctgttt caatatattc agtatacttt gtccttaatg ctgcttctgt     1920
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368

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taacagtgat ctctttcttt ttttcattct tatatcttca ttagttcatc ataaatctgt    1980
ccagttgagg cctcaggacc acggcatgat ttcatgactc cgaagtattt tacagaaaca    2040
tttttaaat aagggaaata ttttatatac cagatggttc acaagtgatg gctcatagct    2100
agtttttttt tttcttctaa aaaatgtcag gtttttaaaa tcatttacct tattaaaatg    2160
aaaagtgcca tacttaactt ttaaaggaaa gacctgactt gctttttctc tatttagact    2220
gtttttgtac tttactaatc tttaaactat caggaaaaaa accaaaactt tataccaatg    2280
atttagtaat tttgaggcat agggtagctt acgtagtgga ggatgtgcca aatattctct    2340
tcaaatgcca ccttctcaat ttataactaa aatagtgtta tctgactaat tcctctgaat    2400
tttgatgtaa gatctatata ggccccaaa atgatcgtag tacatgccag tcatttctca    2460
gtgaaataaa tacaatacca gagtacatta tgggttttat tgctttcttt tatggtagac    2520
ctgttaatgg ggaaaaaata catcaaatca aatagaatct tatatctgta tgttaaaata    2580
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<210> 631
<211> 4417
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4190)
<223> n equals a,t,g, or c

<400> 631
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cggcaggcgg attcattcca cttaaaacct gaaaacattg gaccacacaa agtcttactg     180
atttcaggta aaaacaataa ttgaagatgt ccagcaaaac agcaagcacc aacaatatag     240
cccaggcaag gagaactgtg cagcagttaa gattagaagc ctccattgaa agaataaagg     300
tttcgaaggc atcagcggac ctcatgtcct actgtgagga acatgccagg agtgaccctt     360
tgctgatagg aataccaact tcagaaaacc ctttcaagga taaaaaaact tgcatcatct     420
tatagtggaa tagagaaaca gctcctcgcc tcttcccaac aacgcaaatt atgagcagct     480
ccttgaagag atttaccttc agcttatttg gtaaccactg ctaataacta aaatgttctc     540
agcttggaat aatggactct gaagtctcta ttttccaagt tgtcctttct cttaaaatac     600
cctttactga tttaatacag aataacaatc ttattttcca cttggtaact atggctttat     660
gttgggttac tgtttaagga aagttgatct gggccttttt aaaaacataa ttatatactt     720
tagaaataca aggsattccg atatgtcagg acctaaatgg cctaagcacc tgtcaaatta     780
aaattccaaa attcattgaa atcctaaagc cttgatatta tattctttat aaggcgtgtg     840
ccagcctgta tagtatataa gagagagggg tgtttgtgtg tatatatata tgcctttgtg     900
tatacactta tcaaagctat tttcttatga aaacgtccct ctctccatac catcagtttc     960
tcagttccag aagttatacc tttattttga gctgtgtata ggtagaataa aaaattcctt    1020
tcatatcgtt attgtacaaa aagtaaagag tatcctaaag attgtattca ttgtaatcaa    1080
gtaatgcaat catctctcct ctcttgaaat cttgctggac ctcttaggct acaataaact    1140
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gctgtgctcc cagggctcat gttctctact ggattaggga tagkcacctc tgaaatctcc    1320
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ccttccccag ccacaggtat gtggaatacg gtgaggaaaa aaaaaattaa aaaaaaaatg    1560
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369

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caagctgtca ggatgcttaa gctctttttca gacatctgca gtttcatccc taccttgttc    1620
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cttgggccca agggctttag cagctggata tggggttcct tgatttttcct ctgggcccaa    1740
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cctatggcca ataaggtatc ttgactttat caaagtagaa gagagggtca cttcggagtc    1860
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aaggaaaggt taaaaacttc ccctcaaaaa ggaatcaacc ccaggaagta attatttaca    1980
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ctcacattta ttcagtattt ctccaagttg ctatctactc agccttatga atgcccctcg    2160
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atatgtatac atatatatga tatgcagaag tcacttttt tatcaggctt tattctcctt    2880
acaaagccac agtttaactg tctgcaacag ttggtttatg ttaatgatag acaaataccc    2940
agtgtttgtt acttttttcca actaccactg taatgataat ctttctcacg tatatacatg    3000
caacttcttg gcttcatttc catgaagctg tttcaatata ttcagtatac tttgtcctta    3060
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atggctcata gctagttttt tttttcttc taaaaaatgt caggttttta aaatcattta    3300
ccttattaaa atgaaaagtg ccatacttaa cttttaaagg aaagacctga cttgcttttt    3360
ctctatttag actgttttttg tactttacta atctttaaac tatcaggaaa aaaaccaaaa    3420
ctttatacca atgatttagt aattttgagg catagggtag cttacgtagt ggaggatgtg    3480
ccaaatattc tcttcaaatg ccaccttctc aatttataac taaaatagtg ttatctgact    3540
aattcctctg aattttgatg taagatctat ataggccccc aaaatgatcg tagtacatgc    3600
cagtcatttc tcagtgaaat aaatacaata ccagagtaca ttatgggttt tattgctttc    3660
ttttatggta gacctgttaa tggggaaaaa atacatcaaa tcaaatagaa tcttatatct    3720
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cagatgcctt ggtccaaaga ccccacccct ctgctggtcc tgccaacgtg ttggtgctat    3960
aagctgcttc agatataaaa ttggtttatc tataatgttt gttcatttaa tagcttctaa    4020
aaggcctttt tgttatacag tgctttttttt ctagttttat ggacttgrtt actgtaataa    4080
tgtcttgttt ttagccatgt aactacaaac agatattctc ttgatgtctt agtaaatttg    4140
catttgatat atcattgatg agattttgtt gttatgtaat attctttggn tacgcatctg    4200
tccagcatct tattaaccat aatactgtga tcattatttg gaaatatgtc ctatggaaag    4260
aataaaagca tgtacttcac agctagcatg ttcacagatt tgaaagaagt ttcattaaaa    4320
gcaccattgc tttctgtact gcgtcagtgc ctcattgtat catcctactt gtgtttttgct    4380
caataaatga ataaaagacc aaaaaaaaaa aaaaaaa                             4417

<210> 632
<211> 324
<212> DNA
<213> Homo sapiens

<400> 632
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tgtgagtgtg tgtctgtatg tgtgtacaac taaagaagct gcagaaactt tgtaatactt     120
tgtgaaaagg attatattat aaaggtttgt actgtctgag tgcacagcta ctggaataaa     180
tttagggaat ctcaggaaca agcatataat ttgtccaaga tttatttctt ctcagaagtg     240
taagtgcagt ttttaattct gtatattatt taatattttta ccaataaaat aaacttctga     300
cataaaaaaa aaaaaaaaaa aaaa                                            324
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370

<210> 633
<211> 765
<212> DNA
<213> Homo sapiens

<400> 633
cttaacctgt gcaattcaga ttgatactca gaatatgggt tgatttgaat atctgaaata   60
tcaatggaaa atcccactca gtttttgatg aacagtttga acagttttct gtaatcaagc   120
agcttgcata gaaattgtat gatgaaattt tacataggtt cttggtgctg ttttgttctt   180
tttttgtttt ttgttgtttt gttatttact tatatacata taaaattta ttgaaaataa   240
aaaaaaaaaa aaagtcacgt tcacgcatcc actggtctag attttcatat aatgtattaa   300
agacaaagta gtgaacatca atgaacatct gatagagata aactgtaatc aggcataagc   360
ttgtttgtat gttctggcag tgactaatca gtaaatgatg tcggtttgcc cagtatcact   420
tatcttctgt attttcctc tgtcgtgtaa atagtataac cttttcattt atggacaatt   480
ttttggacta gtagccttca atatacattc tgctttgaat taattttttc aaatcaataa   540
attatgtaga catttaaaat caaatatcag tagaattgaa aaatgtgagt tacataagtt   600
aaaaacttac tttaaatctt accttctata ggtagctcta aataaattca tatggttata   660
tgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa   765

<210> 634
<211> 853
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (49)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (820)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (838)
<223> n equals a,t,g, or c

<400> 634
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tgtgagcgga taccaatttc ccacaggaaa cagctatgac catgattacg ccaagttcga   120
aattaacct cactaaggga acaaaagctg gagctccacc gcggtggcgg ccgctctaga   180
actagtggat cccccgggct gcaggaattc ggcacgaggt tctgggtcca tacaccagca   240
atgaaggaga tagatttgtg tacttgtgtt ttttaatcag cattaacatg ggcaggcacc   300
ctcatttata gatgtcagga aacattcagt gaaaaacttg tagaatggga tgtgataacg   360
aggttccagt aatctgagca gtctaacgag gcccacctcc tccaccacag aacgtggcta   420
tgttccaagt gctactctca ctcagcctgt tgcggatctt catggcctca ggagacttgt   480
ttctccatgg gctcttctgg actgcacact tccaccatag cttgctgggt tgatctagat   540
gtctgtttgt tgtatggaaa ttttggggga aaaatccaa aacacaaact gtgggttgaa   600
atattaaccg tctccttggt tccttggtat tcaccgtgcc tgatctgcac atttcatcgt   660
ggctgtttct gtatagccta tactgcatta gcccaagaga ttgttgcttt gtaacttttt   720
gcactattgt tttggctgga tttgtattac acacagtttt aaaaaaaaca attccacact   780
aaaaaaaaaa araaaaaaaa aaaaactcga aggggggggn cccggtaccc caattggncc   840

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cttaaaagtg gag                                                       853

<210> 635
<211> 1293
<212> DNA
<213> Homo sapiens

<400> 635
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atatatattt agcttgtaaa tacaagactg taaatgtatt aagagacaat ttctgttaaa       120
gttttcattg tgtttcactt caagtactgc acaagttaaa atctgataaa ggatttacat       180
tcggttatct gaaactcccc atctcagact tttgtttaa tgtggtgggt aacttcatca        240
tttccataga taccaccagc aggaaagtgt ctcttttatg gcttctagga ctttcattag       300
ttagtgtgca tacagttttc attttctata tcattgtcat tatcattgct atcttcatca       360
ctttctaatg ggatgccagt ggcagctgaa gcacctttag tttctcggtc aagaggaaaa       420
aagccagttc cactgaaagt gtcttgtctc tggtagaaga gtacatatgc tgctttggac       480
acaatttggt cttcagatgc agtggagaca ctactgtcat caaaatagta ccattttcca       540
tcatctttat tttttgcaaa agcagtatag tgtcctcctc ccatccctcc atagtggttg       600
gaaacagcaa tcagattata gcggcaagga cctgcatttg gattaattaa gaattccgac       660
atatccaagt cattgatagg aaaatcaact aaggtatcca acttgtctct catgtatcga       720
ctgtaagaaa atcgcttgag atgtactaca agtactggag gcagggacca taaayccaat       780
ttctttgtgg cttgctgatg ttctttacaa ttcggacaat accagggatc ttcagcacct       840
agcttttctt ttgttgtaaa aagttcaatg caatctttta atttcacaaa gggttttta        900
ggaggtttat actccacact ttcatgtttt tcaaagtcct cagcagcatt ttcatcaaaa       960
tatctttttt tcaaatcagg atcccaatcc aaagcaagaa aagatctttc atctagccta      1020
agctgcctat catcaaatct tatatgcctg gtatcatctt tgatgtagtt gatatcagta      1080
ttgcctaagt tgttgaactg gaatgtaaac aatcgttttt tgtgtcccgt gagttgacct      1140
tkkcaagtat ccwcagtaca taatccattt tcagaatcat tatctcctcc aactgaatct      1200
tcagactgac tgttttcatt ctctgaggga agttcttgat cctggctgga ttcatcatct      1260
ggctcatctg tttccatttc acttggtgag ccc                                   1293

<210> 636
<211> 1771
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1706)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1740)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1770)
<223> n equals a,t,g, or c

<400> 636
cgccgtcgcc cctcccsccg cgcaacccgc cgccgcgatg gcccagcagc agatgaccag        60
ctcgcagaag gccctgatgc tcgagctgaa atccctgcag gaggaaccgg tggagggctt       120
ccggatcacc ctggtggacg agtccgacct ctacaactgg gaggtggcca tcttcggacc       180
ccccaacacc ctctacgaag gcggctactt caaggcgcat attaaatttc ctattgacta       240
cccctattca ccacctacct tcagattctt gaccaaaatg tggcacccca acatttatga       300
gaatggagat gtatgcattt cgattcttca tccgcctgta gatgacccac agagtggaga       360
actgccttct gaaaggtgga atcctactca gaatgtgagg actatcctat taagtgtaat       420
ctcactgctt aatgagccca acaccttctc cccagccaat gtcgatgctt cagtatgtt        480
caggaaatgg agagacagta aaggaaaaga caaagaatat gctgaaatta ttaggaaaca       540
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                                       372

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agtttcagcc actaaggccg aagcagaaaa ggatggagtg aaggtcccca caaccctggc      600
ggaatactgc atcaaaacta aagtgccttc caatgacaac agctcagatt tgctttacga      660
cgacttgtat gatgacgaca ttgatgatga agatgaggag gaggaagatg ccgactgtta      720
tgatgatgat gattctggga atgaggagtc gtgacgtgct ccttcagtgc ccctgtactg      780
ccctgccatc tcaggccaaa gggaggggag caagtgggga cctggccatg gcccctcagc      840
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tctcagtttg ctcctttta tggacctta atggagagag agtaaccctc cacagaatgt      960
ctgaattctt gcattcttta cccttccatc actatattga ttcttttta aaaaacatga     1020
acccaaactc ccgcctcact tcgtctctac agaatgttca cagcaaaaca cgtttggtct     1080
gtttttagat tcttgaagaa ttcaatagtc tttcaagatg tttaatgtgt ttaaagctgg     1140
gaacctgttg ggagttcaca agtgctgcat atactgggta gcaaaagaaa atggaaaaaa     1200
acccacaaaa caaactttaa aaaaaaaaaa aaaaaacaaa tttgccaagg tttagctgct     1260
catttacatt agtgtgtgtg cattcgttca gccccatggt ggtgaattct gtttctttcc     1320
tttcctaagg ctgggacatg gtgggcatca gggactttgt gctaagcctg atgaaatgtg     1380
ctccttcaat ctccatgaaa ccatcgtaac atggaggcct cagctgctct gaggagagaa     1440
atcagacttt gtttttttgaa atcgattggg atcgaaagcc tgaaataaat attcatactt     1500
tccatagaac tgagcacttg gttgctattt attttaaagg cagggttatt tcccccccagg     1560
gagtggggca agcggggaag ttgggatgag tgcgtgtggg agcaaagagt taaaaatcac     1620
tatgctaagt ttggttgatg ctactggggg gaaaaagttg aaactactgg tgaccactgt     1680
tgggagaaga aacatctgtt ttatanattt agcatggcct tcccatcaaa aatacactcn     1740
taccatgacg ttttgttttt gtttttttaan t                                  1771
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<210> 637
<211> 699
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (694)
<223> n equals a,t,g, or c

<400> 637
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tacccctgta ttaatgtgct caggctgcca tgacagaaaa ccacaaaccg gctggcttaa      120
acaatagaaa ttaatttcct cacaattctg gatgcttatg gtccacgatc aagttgtcag      180
cagggttggt ttcttaggcc actccttggc ttgtagatgg ccaccttgtt gctgtgtcct      240
cacgtggcct ttcctttata tgtgcgtgcc cctgccacct ctatcttaag aggacaccag      300
tcatattgga ttagggtccc accccaacaa cttcatgtta acatcatctc tttaaagacc      360
ctgcctccag ctgggcacgg aagctcacgt ctataatccc accactttgg gaggctgagg      420
tgggcagatc acctgaggtc acaagttcga gaccagactg gccaacatag tgaaaccctg      480
tctctactaa aaatatgggc acsgtggtgg gcacctgtaa tccagctact caggaggctg      540
ggacaggaaa atcgcttgaa cccaggaggc ggaggttgca gtgagctgag atagctccac      600
tgcactcaag cctgggtgac agcaagactt tctctcaaaa aaaaaaaaaa aaaactcga      660
ggggggggccc ggtaaccaat tygccctaaa gtgngtcgt                           699
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<210> 638
<211> 1453
<212> DNA
<213> Homo sapiens

<400> 638
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ggcacgaggg aatttgggat ttctattaat ttgaaacaat tagtgtctta aaatattgga       60
gaatatggta tgtctctcca tttatccaca gatgtttaaa ttttcttagt ttttcatat      120
aggatataat gtttgatttg ttgtttattt ccacttttat attaatcttt ttagctagct      180
tggatttgga agtgaactac tgaatctttt tttcttttt tataagcttt tgttaggagt      240
gataaaccca aactgttcag aggactgcaa atcaagtatg tccgtggttc agaccctgta      300
ttaaagcttt tggacgacaa tgggaacatt gctgaagaac tgagcattct caaatggaac      360
acagacagtg tagaagaatt cctgagtgaa aagttggaac gcatataaat cttgcttaaa      420
ttttgtccta tccttttgtt accttatcaa atgaaatatt acagcaccta gaaaataatt      480
tagtttgct tgcttccatt gatcagtctt ttacttgagg cattaaatat ctaattaaat      540
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373

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cgtgaaatgg cagtatagtc catgatatct aaggagttgg caagcttaac aaaacccatt    600
ttttataaat gtccatcctc ctgcatttgt tgataccact aacaaatgc tttgtaacag    660
acttgcggtt aattatgcaa atgatagttt gtgataattg gtccagtttt acgaacaaca    720
gatttctaaa ttagagaggt taacaagaca gatgattact atgcctcatg tgctgtgtgc    780
tctttgaaag gaatgacagc agactacaaa gcaaataaga tatactgagc ctcaacagat    840
tgcctgctcc tcagagtctc tcctattttt gtattaccca gctttctttt taatacaaat    900
gttatttata gtttacaatg aatgcactgc ataaaaactt tgtagcttca ttattgtaaa    960
acatattcaa gatcctacag taagagtgaa acattcacaa agatttgcgt taatgaagac   1020
tacacagaaa acctttctag ggatttgtgt ggatcagata catacttggc aaatttttga   1080
gttttacatt cttacagaaa agtccattta aaagtgatca tttgtaagac caaaatataa   1140
ataaaaagtt tcaaaaatct atctgaattt ggaattcttc tggtttgttc tttcatgttt   1200
aaaaatgatg tttttcaatg catttttttc atgtaagccc tttttttagc caaaatgtaa   1260
aaatggctgt aatatttaaa acttataaca tcttattgtt ggtaatagtg ctttatattt   1320
gtctgatttt attttttcaaa gttttttcat ttatgaacac attttcattg gtatattatt   1380
taaggaatat ctcttgatat agaattttta tattaaaaat gattttttctt tgcttaaaaa   1440
aaaaaaaaaa aaa                                                       1453

<210> 639
<211> 1140
<212> DNA
<213> Homo sapiens

<400> 639
ggcacgaggt aaattggttg aagaaattag atcccaaaga ttcttggtga attttgaagt     60
cttcatcagt atatccatat taaaacgaga tgacagaagc caaagtaatt atggcaagta    120
atggttttta tcttaactat aagttatttg ctcaagggtg taatggtcat taccaaggct    180
tttagaatgc agtttctcat ttgctgtgga catgaccata aaaaaatttc ccagtaggtt    240
ttctatctgc tactttgcta gcaatcagct tattgggaac agttgattaa ctgtaataga    300
aatgcaatac aaataaaatg tgaaccacat gtgatttttc tttaaaatca gtgagatttg    360
aaaattctcc tagatctctt gaatcatgca aatttgcttt gcctttatat tgtaaccctt    420
gtgggttgct aataaccaag cagtttgtag tagagttaac tcaggctcgt tctagggact    480
cattcatgtt cactcactgt acactcatct ctggaaatgt aaaatttact tttatactat    540
tgttatgtag gctgacagga caactggatc agtttcatta aaaggtatg tatgcattag    600
aaaagacatt tgtatgggtc atttcaaaga aggcttatga agctgtgaaa cccagagctc    660
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tggtgctatg ttttcctgag gagatataaa acgtaataat ccatgattgt tgccatgtga    780
gagtttaaa ggttaatcaa aatttctctt cttcagggca aacttgaaga taaatctttt    840
gactccagct cttagagga tctaaagtga ccttgatgga cagtggaaga aatcacaaca    900
tggaattcct cgaataacaa tttattgact ttaaataatt ttgtctaatg ctacatatac    960
acaattaaaa aacctttaca ctatttctag aaagtcagca tgtattttg gctcgaagtt   1020
tctctagtgt tttctgtgga aggaataaaa atttgagttt cagttgtgta aaaaaaaaa   1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa   1140

<210> 640
<211> 1397
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (579)
<223> n equals a,t,g, or c

<400> 640
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cagtgttttg tgactttcat cgtagagatc ctttacctcc ctggttagct gtattcctag    180
tattgtattc ttttgtggc tattgtgaat ggaattgcat tcttgatttg ctgtcacct    240
tggatgttgt tggtgtatag gaatactact gattttgta cattgatttt gtatcctgaa    300
actttgccaa agttgcttat cagatcaagg agcttttggg cagagactgg aatttctag    360
gaatagaatc ataacatctg aaaacaggaa tagtttgact tcctctcttc ctatttggat    420
```

                                    374

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gccttttctt tttttttgtc tgattgctgt gtccaggact tccagtaata tgttgaattg      480
gagtggtgag agaaggcgtt cttttcttgc tccagttttc aaggggaagg cttccagctt      540
tgctcattca gtatgatgtt ggctgtgggt ttgtcatana tggttcatat tatttttgagt     600
tatgttcctt cagtgcctac tttcttgagg gtttttaacc tgaagagatg ttgaatttta      660
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atgtgatgaa ctcacatgta tttatttgtg tatgttgaac caatcttgca tcccagggat      780
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agggaggagt ccctccttct caatttttg gaatagagtg gtaccggctc ttctttatac      1020
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cccacatttg gccctcaggc cgtactttgc tgactcctgg tatctggaca agattgctgg      1200
gtttcgagct gaggtttcac atggggcttg agaccatat aatcacagag tggtctcaaa       1260
tgggtctcat acttttgtat gtatttgtaa agttcacggt aatagcactt gccatgcctt      1320
ccttagaaag ttacatggga taatttaatt tttaattttt gttaacattc tatagactta      1380
aaaaaaaaaa aaaaaaa                                                      1397

<210> 641
<211> 1883
<212> DNA
<213> Homo sapiens

<400> 641
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caccatttaa agccactgga aatttgttgt ctagtggttg tgggtgaata aaggagggca      120
gaatggatga tttcatctcc attagcctgc tgtctctggc tatgttggtg ggatgttacg      180
tggccggaat cattcccttg gctgttaatt tctcagagga acgactgaag ctggtgactg      240
ttttgggtgc tggccttctc tgtggactgc tctggcagtc atcgtgcctg aaggagtaca      300
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tcacttcttg gcacatttca gttccgtttt cctcttgttt aaaactgcct ctttagatgt      540
ggatgcctta atgctgtaac acatttgaaa acattggcaa tacttaagtt gctgccatga      600
ttacagatgg aattattggc taccaaagag acgcaattga tgatgagaag catgattctt      660
gcttccatat aaccaaagtt aatcttaatt gcaatttgac tccgtttcct tggtagggat      720
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gctccattcc cctcacttat tctccagtta attgcttgtc agttccattt caagaaagca      840
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gtttctctt tctccccgct ttcacctctt tctttcccaa ttcaaaacag ccaagtgagc      1020
cctgttctgg tattttgaat cattagagaa aagaaaggga gtggctgttt tgagttgtcc      1080
ttctttgcag aaaggagaaa atgtgattgt gtttttttt taccagccta cttctaagtg      1140
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cagcacaaac ccccaaagga tgttcctgcc ttgtgggccc ctgagcccct tgggagactg      1320
agaatcatga ccagattcat ccagaactgc tgcagtgtta agtgaaaatc ctctgtagtt      1380
gttctgcaga ggaaccttcc ttccattaga aaatttctgc tcaatacaga atggtccaca      1440
tcacccaaag tgcactgttg gagatgctgt gaaattaaaa cctctttgta cctgagacat      1500
ctagattcac ctcaggaggc ctgaaggaaa tgtgtaactt gtgggaaaga actagacaac      1560
catttaggaa ttctctagat atactcagcc taacccagtg gcttaacaca aggagattgg      1620
ctttgatctt tttttcttgt ggcatcttcc agcaagttag aagtctcatg ggataagact      1680
gcagttcccc tggttcaata gctggaacag tgattttaaa tgtccctttt tctggatccc      1740
ttgtaaacat gaaatcattc catggatggc tgccttataa ttttgtctct ttccacttta      1800
attgtgaatg gttaaaaaaa tgctgttttc tgatattaaa ttttattag tgcatacctt      1860
aaaaaaaaaa aaaaaaaaaa aaa                                              1883

<210> 642
<211> 2220
<212> DNA
<213> Homo sapiens
```

<400> 642

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ccccaaggtg tttgaacggg taaaaaatcg gggctttcgg gattcgccaa ggtttgccta      60
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taatccttat gtgtcctata rggaataaaa tggtcttcat tkgacactta ctttcccatg     180
aacacttgca gttgctaagg gactttattt tgtaacatat caattataaa tattgtattt     240
atctttgaaa ttttgtacat tgctttтccc acctttтcct ttttcttctt tcttgtctgt     300
attggtttTt gatcacggcc tggtgttgtg atactgggaa gagcattagc caagaacttg     360
tctctttgat ctgtttcgtt aagctgaacc agtgtcttta catttcattt gtacttcaaa     420
aatatatgct attgtttaga ctttccatcc tttttttttt ttattttgag gaaaagtcaa     480
attcattgtt tattttтata ttattтttaa gttatctgaa caaatacttt tgaaaaaaaa     540
gtttgttgta tagtcaaaac aaatcggtgc cacccggccg tgacaaatcc tagtagattc     600
tgtgcatgtg gagcggccgc gaagaggtga caccgtttgg ggctgtgtcc ttattttatt     660
ttattttttt gtagaatgta aaaagtcatt ttagatgcca cccattgact ttgccacata     720
gctgaactgt gtttactgga aaaattcaga ggcctaaagt ttaaaтaaaa atttacttct     780
gatgtttтaa ttaaaatgtt tgccacatta acttttctga tgccttaaaa gtgaacttct     840
ttaaagaacc tttgtgctat tttatcacag gcttacacta caattgttaa taaatacttc     900
atttggagat gtatggtgta aaacacacaa acacacacaa aaaagcacaa gcccgctgca     960
tgacccgtct ctcctttctg ggactatttc tgctgcgtcc tgcaccctcc tgggcccacc    1020
tccgattcac agaggtttca gggggaccca aatcactgct ggttttcaat tttttttтaa    1080
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caataagatt gttttatctg tacatttttt cagatatтta actgtataaa aatgttcatt    1740
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tgttttтgat tattaaaatg actaaacact aacataaaag ttacatcagg ggtttcattt    1860
gcacagaccg ggttctgaag ctgcaacttg gccaagataa aaatgttcca cagaggaact    1920
ttccacaaag ttatccagcc tccgtcctct aacctgcata gaaagagagg ttcagcaaat    1980
tgtcacttac gtggtcctga cccccagagg tgccatctgt attcatgctg cactctggct    2040
gatgtttctg tgtcacagat gttctgtggg ccacagcagc actggggtga cacaatcact    2100
gttccagcac ttgtctttga gaactcaaac aatcccaagg ctcactgagg ggcttcataa    2160
cccactccct ccagaccttc tgccccagcc cctctgcttc tgaatagcgc actgggcagc    2220
```

<210> 643
<211> 432
<212> DNA
<213> Homo sapiens

<400> 643

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ggcacgagct agttttgaag atttacttca agtttgaatc ttctagaatg cttgtaagtc      60
cagtttтaat ttttagagtc aatttgtagt tacatgtagt ttaactтttg ggaaacgtct     120
taacattgtt ctgagaataa acttgctaat gaggtcaggt catggtacag actgatgcag     180
tcaacatgat ttcattgcag agtттattag tatcagcaag tttttgcttt gctaaataaa     240
agtactcaat gaacacaatt ctacataaat tttgacatac catctaattt ataaaaatca     300
ataaaaaagg ttttggtaaa acttтttcat gccagatgct gtttacaaca atgaacatgc     360
caataaaaca tttgttcatt caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     420
aaaaaaaaaa aa                                                         432
```

<210> 644
<211> 1799
<212> DNA
<213> Homo sapiens

<220>

376

<221> SITE
<222> (1355)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1356)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1589)
<223> n equals a,t,g, or c

<400> 644

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aattcggcag agctagaatt tactatttgt tagttacata caaaaattat aatttatata      60
cataaagtta tactatgctg tcatttttaa tatccgtaca acattgcata gtaccataat     120
ttagtctatt gatgtacatt aggttatttc taatattttg ctatttatat gcacattgca     180
gtgaacactc cctttacata tgtccttgta gtgttgtctc ctaagatata ttccttttat     240
atcttacatg gtgacaacat taaatatctg aactctgtga catcttgggg acatacattt     300
acctctgata atttgctatt tgtatgaccc ttgaattgag taaatgcacc ctaggcatgg     360
tagaccagag aactaaccag aaaagtggca ctgtgtttag tcatcctaga ttctttaaga     420
tttttaaagg taacttaagt agtagttttt gtctagtcca tacatgcatg tggtgtaaaa     480
ttcaaaagat atagaaaggt aaagtaaatc tttctcccac tctgaaacct cttctaccca     540
gtttctgctc ctgggaaact actatgagtt tattcatcct tctgcacata tttatacat     600
atatgtatac tttctgcaca tatatgtgca tatatatgta tatattttaa gttttttgta     660
aatgatagca tactatgctg ttctacagtt cactttttct cacttaacta taataatatc     720
taacacttac gtagtgcttt gttctaggcc ctgttctaac aagtgttttt gtattgatta     780
ctaatcttca tcacaaacgt gagaagtagg taaatattat tcccttacca cagaggaaga     840
aactgaggca cagaaacttt aaatgacatg ctagtaggtt gtcagctgga aggtgaactc     900
cagcatccag cagtttggct acagagtctt ttatattagc ccatttgcta tactaactca     960
attgttgcct cattcttttt attaactaca taatattccc ttgaaaaaac ttcagtttat    1020
ctaactaggt cctagttggt ggacatttag gtgtttccat atactgctgt tatagatgat    1080
gctagtgtga atatcctggt gcttataaat gcctgtgtca ttttgaatat gtaaatctct    1140
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gcatycctca gtctatttac tctctcacgt tttgttggtt atataaaaac attatcagga    1440
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ggattcaaat gctcaaagtt tgttattttc gatagttttt taaaaatctt ttagatggct    1560
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tttttttttt tttttttttg agtcggagtt tcgctattgc actccaaccc ggatgacagt    1740
gtgagactct gtctcaaaaa aaaaaaaaaa aaagaaaaaa aaaaaaaaaa aaactcgag     1799
```


<210> 645
<211> 1521
<212> DNA
<213> Homo sapiens

<400> 645

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cagcctgctt actgccagtg ctagttcagt aaatatgttt ctcattttct atttggcaaa     120
attagataac ctaagcctag gaaaaataaa aaattagaaa aaaaaaagta gatttggggga     180
tatttaactc aaattgccct tactggtgga aactcgaggc agttacttag attatttcca     240
aatggctttt tttaaatgta tttctatatt gtatacaaca gtctcagtct tcatctctcc     300
tgttcagcta tccatacatc ccttaaaatt agatatttt aatgtttagt aaaccttcag     360
tttgggttta tagacaacat ttaaccttct catgaaaggg tcagaatact ccagttgcag     420
gcacaaacag gccatagttt agttgaagga gaaactgcga actcaaagga gcactgcttc     480
tctgcaggaa agatcccgtc agtggacctg cggggcacag ctgccaccag tgtcatgtag     540
```

```
ctattcagtg tcggaaaact agaaatcaca agtgaagaga aattgtaaat tacctcaaat      600
tctatgccca gaagcaacca ctatggaaat ccttctagac attgtcccgt ataaatatat      660
ttccctaaaa aaaattatac cccatactct gccacttcaa aaaaatcaag actgtttttc      720
catgtcaata aatatctata tcatttaatg aatacataat actcccttgt ttgaatgtac      780
aatattctgt attgttgcac atttgttgtt tccaatttaa caattacagt actccaatga      840
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tctcaaccat gggcaattta gccccctatg gcacatttga caacgtctgg agacattttt     1020
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tgctaaacat cacgcaacgc atgggaccgt cctccatgac aaaggacccg tgcaaaatgt     1140
caatagtgcc actgttgaga aacccggatt aagatcatgt tgtaactaca tttcagtggg     1200
ataagacttt gaaagtttcc accgggcaca gtggctcatg cctgtaatcc caacactttg     1260
ggaggccaag gcaggcagat cactggaggt caggagttca acaccagcct ggccaacatg     1320
gtgaaagcca gtctctacta aaaatacaaa aactagttga gcatggtggt gcgcacctgt     1380
aatcccagct actcaggagg ctgaggcagg agaatggctt gaactcgggt gggggaggtt     1440
gcaatgagcc gagatcgcgc cgctgcactc cagcctgggc gacagagcga gactctgtct     1500
ctgaaaaaaa aaaaaaaaaa a                                              1521
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<210> 646
<211> 1185
<212> DNA
<213> Homo sapiens

<400> 646
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ggaaaaaagt aagactgaag cagacatgga agagtatata tgggaaaata gctcatcaga      120
aagaaatatc ctggaaacgc ttctccagat gaaagctgct gagaaaaata tggaaataaa      180
taaagaagag ctccttggta ctaaagaaat tgaagagtac aaaaagtctg ttgttagtct      240
taaaaatgag gaggaaaatg aaaattccat ttctcagtac aaagaatccg tgaagagact      300
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tgattttatc acctttccca tttctttccc cacaagctgg catttcagta gttgcttttg      660
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ccgggctgtg ttcacatgac tgctgtctag ctgatgcatt tttcacattt gtcaactctg      780
gttagaaaca ggtcctcagg agtattctct aacctgatat tttctaaaaa gatatgttga      840
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taccagaaaa gtagaagtgg agattacctg gtatgtatct ctctgggtgc cccagttaga      960
gctgccacag ctcaggaaaa agatgaggca taacgacctt gaatgtaatt ggagtaagtg     1020
acaaaataag aactaccctg ggaaaccctg cattcaatgt agctgtcaat tcagtatttt     1080
taagtacacc tgtcagctgt ttcttaccac ttcgatggtt gtgattaatt taaaatcaaa     1140
ataaaggaat tactgagttt aaaaaaaaaa aaaaaaaaac tcgag                     1185
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<210> 647
<211> 1649
<212> DNA
<213> Homo sapiens

<400> 647
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gaatttgctt caatgtttta tttttgtgtt accagtttta ggttgactgt ataatgaaat      120
tctgtatttt gaatcacatt tccctgctga tatcagccca gcttataaca agtaatgctt      180
gccttaaaca tatttttct ttctctcact tctgccatca attcaacaat aggattgcag      240
atacagttta ctttggggct gaattaagca gtagcagagg ggtgtttgta aactaactga      300
tgttatcaat aggcagggac acagcatggc ttaggatcat ggtcttccag cttgatgacc      360
tgctttgcaa tctgtttgct tcatccacat caatgaggag ccagaccttc tggtccttca      420
tttactcata gactctctta agagctttgt acattcaatt ctgaacttat tggtgccata      480
aaatattatt actgtgcaaa agaataaaag tgctagtgtg ttcttattag tagccatgaa      540
tttcatttct cttttccctc ttcccacctg agattcatct ttgaggggaa gccagatacc      600
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tataaactat agagcatttg tgttttcatg gatggttatg tttagtttta taaggaccaa   1020
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tttaaccggt tgctagaagc tacatcttac cttagtcatc aactagactt caatgtcctc   1140
aataataagc ctgtgtccct tggccaggca ttggaagttg tcattcagtt acaagagaag   1200
catgtcaaag atgagcagat tgaacattgg aagaagatag tgaaaactca ggaagaattg   1260
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<210> 648
<211> 3484
<212> DNA
<213> Homo sapiens

<400> 648
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atttcttgct tgtatcaatc ctgatgatag ccatcctgaa cagatgcttc tggtctgttt    180
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ggaggagact cattttaacc ccagtccagt ggcttgtccg acaacaggcc atttcccttt    300
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caggtgctta ttagaggtag tgacttgctt aattagtgac actcctaatt tctactatgg    720
ataatttcaa agtagaatca ctctatgctt agagttttgg caccaatgct gtagggcagc    780
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attcaaagag aaaatttcta caccttatc cctcaaataa aacaagtgct cagttcttac   2100
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379

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gcagaatatt tttaaagaaa tccagcaagc aaactttgag gtgctaatga aagtaaagga    2340
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cgtggggtct ggctgctttc taccaaagac atttagagaa gtgaattgag tcaggtgat    2460
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acactagtcg tacagtcagt gtaaatgttt ttcatttaca tgttttcatt atatcagctt    3420
atcaaatcct taataaaaaa aattcataga tttcatttaa aaaaaaaaa aaaaaatgac    3480
cctc                                                                3484
                                                                    3484

<210> 649
<211> 1593
<212> DNA
<213> Homo sapiens

<400> 649
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agtttagtaa ctggttatta ttaatcattt gggaaaaatg aaaatgtgtt gggactttct     180
atgactaggc atttgttgat tatttttcat gattgctttt tgttttctca ttgtgtagga     240
tttgtgaact tgtatattac aggaaacaag atactttgta aaatttactg gggaaaatcc     300
atttggagtg catgacattt gccaggataa gaaagcagta atatgtttgt attataaaat     360
tacaccctgc cagaaaactt tctttcctag taaggtaaat gtagaaggga cttttacagc     420
atagtaagtt gattaggagc caaaatttta ttccagtttt tttttgaact aagaatgttt     480
taaattctgt aatgaacttt tatgtttacc cattactcat gcattctttc acaatatgtt     540
taatagcctg aggaaatagg aaagctgtga agctactacc attctttact tttaataaga     600
ataataggaa agaaaagtca ggtcagtaat ccaaatccaa atatgtatac tgcaaatgct     660
caagaagtca cattttttga taaattgtat tgagtacaga agaacttata tgaatttatt     720
atctgttaat aacttagttt tgacaacaga ataacatttg gaaattgtga gaataatcaa     780
gctgtttttc cattaacagt gtaaattcat aacatgtcct tcaaaaggtg atattctaag     840
ctgtcttaat tgtctacggt tgataacttt taaataaagt acaggacttt ctgaaagtgt     900
ttggcatgtt atgctgccaa aaacaatctg tgttttgaaa taccaattaa tcagttaatt     960
tctgaagact ttgtatagga cttgatatat gagtcagaat ctgtctgtac tcattctgta    1020
cattgtaact ttgaacactt atgaaaaact gtatctgttg gtgtgttttg attagttagt    1080
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tgatgttact agtaaaaaat gtttatagat aacacgtaga gctattaact gttcaaaagc    1260
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gtaaatgaaa ctgtaaaata cctctggata tttgtgccaa tgaactttc ttagcatatt    1500
aggattaaag caaaaataat cttttcagta tgtttcatct aggacttaca ataaatgttt    1560
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<210> 650
<211> 933
<212> DNA
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380

<213> Homo sapiens

<400> 650
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gcttatgccc ttatagaggg ggatatgata gtctgtgcgg catatggcat atgaactgcc   180
aaaatatggt ttgaaggttg gcctgacaaa ttatgctgca gcgcattgta ctggcctgct   240
gctggcccgc agcttctcaa taggtttggc atggacaaga tctgtgaatg ccaagtggag   300
gtgactggtg gtaaatacaa tgtggaaggc aatcttggtc agccacgtgc ctttacctgc   360
tatttggatg cagaccttgc cagaactacc actggcaata aagtttttggg taccctgaag   420
ggcgctgtgg atggaggctt gtctgtccct cacagtacca aacgattccc tggttatgat   480
tctgaaagca aggaatttaa tgcagaagta caccggaagc acatcatggg ccagaaagtt   540
gcagattaca tgcactactt aatgaaagaa gatgaagatg cttacaagaa acagttctct   600
caatacataa agaacagcgt aactccagac atgatggagg agatgtataa gaaagctcat   660
gctgctatac gagagaatcc agtctatgaa aagaagccca agaaacaaaa aagaagaggt   720
ggaaccatcc caaaatatcc cttgctcaga agaaagatca ggtaactcaa aagaaggcaa   780
actccctcag agctcaggag caggctgctg agagctaaac caaacaattt tctatgagga   840
tttttcagat aaagacaata aactgatgga tagcaacaac aacaacaaaa aacagaaaaa   900
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa                                 933
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<210> 651
<211> 1685
<212> DNA
<213> Homo sapiens

<400> 651
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cgtatggcat acagtgaaca atacaaataa tttcaagaag tttgattttg actactatgg   120
actttcattt tctagttgtt ttctttttttt cttatcattt tcctttcctt tttcttcatg   180
ttggaaatct ttcttctgct gccttcctct gtcaattaaa aggaaaatcc cacctaaacg   240
cccaccaaga aaacacattg tggagcgcta tacagagttt tatcatgtac ccactcacag   300
tgatgccagc aagaagagac tgattgagga tactgaagac tggcgtccaa ggactggaac   360
aactcagtct cgctctttcc gaatccttgc ccagatcact gggactgaac atttgaaaga   420
atctgaagcc gataatacaa agaaggcaaa ggaaaagata ccccttcacg tctttagtcc   480
caaatacaca aaattacgtg actggcacca tgaagtttca gcacgtgctc ttaacgtaca   540
gtgatttatg agccttgccc cccaagcagc cagcacatac cttttcattt acttttttttt   600
tttcaacttc atagcaaaat ctgtattaaa tttgccttat gaaaaaatag aactttttct   660
atactttttct aacaatttcc tattgttgtg agaaaaggaa gatgaacatg ttttgtgcta   720
gttggtagct cacaaatgta aaaccaaaaa aaaaaaaaaa tagaaaatta agggactaga   780
tctatttgtg gatttgtatc tgttttttgtt gtgattaggg tagtaatctt ggaaaacgaa   840
ttattttcat aagttgaatt tggttagttg gttggttgaa gcagaggata atgagcaaat   900
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taagttcatt attatgttac attcaaagtt gattgtaaat tattctaaat aagtaaatat  1020
aaggaggcaa gaataaacaa agactttatt aaagaagagt gygtgcattg tagatttagg  1080
tatcttttaa agtaggtact attcaggatg gctctatgaa gaggaggagg tccagatttg  1140
gctcctgaaa aaggaaagaa gagaatttta cccctatttg caatggagaa atacagtatt  1200
ctttggtttg gttggatttg caaatcctat ttcctatcaa aggaaatatc tctagtggat  1260
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gcttttttta atcagaagaa cataaaataa attacaatat gaatgattgt gagacatcag  1380
agaaatattt tacttagtga cgtaaactac tgtgcactgc tgctattcct aggaagctgt  1440
gttttgggca atacatggaa gctaaatata tgaccagaaa tgctttctgc cttgtaatat  1500
agtgtattat atattagagc taaatttagt aataaatgca ttttgaagtt tggaaaagta  1560
ttgtaataaa gttgccttta acttagcttt gtacttgttc tgtttccttg aggctagaca  1620
cagtgccatc caggacttat tacagtataa ctgggtaaaa taaacaattc tctgacaaaa  1680
aaaaa                                                              1685
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<210> 652
<211> 526
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (13)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (57)
<223> n equals a,t,g, or c

<400> 652

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gaaccctgtg gctggcattg ttattgcact ctgttgtcac cacaggtgtg attggagaca    180
ttatgtgggc aaagaatatt tcagggctct aggccttgga gcagtggaat tccattattt    240
ccagcgaatg agtagttggg caacttgtgg gatgcggaaa acatctttgg aaacctcaaa    300
tagtaccaca aagaggcaag ataatcagaa tgatgatagt gaagagcatg atgatggagg    360
atacagaatc acagatgatg gcgctgattg tttgcctggg taagagacta cttttgtaat    420
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ctgaaatgta ttttataatc taattttaga ataagctaaa atatac                   526
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<210> 653
<211> 1582
<212> DNA
<213> Homo sapiens

<400> 653

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ggcacgagga taccactttc ggtagagcta ggaataacag caggagtagg aatgagagtt     60
agcagccttg cagtttccct atcctattac caatgcttgt ccaaggattt tatggaaagc    120
ttaggtgaca ttgcccaaaa gtatcatcac cttacaaaat cagatagagt ctttggcagt    180
ggtggctttg taaaatagaa ggggactgga tctcctaaat gctgaagaag gtggcttatg    240
tcttttttcct agaggaagaa tgctgttttt atgtcaacca aacaggatta gtaagggatg    300
ccacccaaaa actagccgat tggtaccata agatatgaca acagctgtct gagtcatggg    360
gcgcctagtc aaaatgctaa tttggggctc acatctcctt cctctgggcc agtccactat    420
taaattatta tacttgcctt ggcttttgga tcatgtttgt taaatctttt aaccagattt    480
atttcttctt gcctagagac cattatgata atgcagcagg gccaccagtc agtttcagat    540
aatgatgtca accccggcca ccaagaagta acctttctc cactagacag agcagggcga    600
gagttctgta atccccagta ggtagggact gtgccccaag tcagcatgaa gtagttatgg    660
aagaaagacc atgggtccct ctgcctccca gaaagattta tggggatcac atctctcagg    720
ggaaaatgag gcaggagaat agggtctgga gacagggaac ctaaggctga tttgtgctga    780
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cccctcccac aaccaatcat actgggccat gggctactcc ttcgtttaca tagggtgtta    960
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aagaacacat ttctttttt agaaaaatat ttttctgtaa ttttttttt ttcttgagac   1500
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aaaaaaaaaa aaaaaaaaa aa                                            1582
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<210> 654

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<211>  268
<212>  DNA
<213>  Homo sapiens

<400>  654
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gtgaatatgt tgaagtagaa gtctaccata ttattttata aaatgttttc tgtatggcaa     180
taaactgaaa acatggatca acccttcttt tgaaaataaa ctgagtcaat ttagcctttt     240
aaaaaaaaaa aaaaaaaaa aaaaaaaa                                         268

<210>  655
<211>  755
<212>  DNA
<213>  Homo sapiens

<400>  655
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cgctctagaa ctagtggatc ccccgggctg caggaattcg gcacgaggag aactgcaggc     120
agatttctga gggcacacca agccgctgtg aaaatgggga taaacacccg ggagctgttt     180
ctcaacttca ctattgtctt gattacggtt attcttatgt ggctccttgt gaggtcctat     240
cagtactgag aggccatgcc atggtcctgg gattgactga gatgctccgg agctgcctgc     300
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cggtctgcaa ccaaactcta attcaacctg ccagaagaat gttagaggaa gtctttgtca     660
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aaaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaa                                  755

<210>  656
<211>  1875
<212>  DNA
<213>  Homo sapiens

<400>  656
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actgttatca tcctcctagc agaagatagt cctactgaga aaatgagcac tttgatcatt     180
cagtctttga actttaacct ttgactggaa gtgacctata ggcaatgaag actacttcct     240
tttactgcat ttttactcgt gtgcattctg ggcgcatgtt gatcgctggt tcagtccagg     300
caactgacat gcttttatta gtcatacagt attaatgcag gtgtcaggaa atgtcaaata     360
taattccatt tttattttt attttttaa gcttttggaa aagctccagg tcctcatgta     420
ttgtgcaata acaatgactt ccttggcggt tttggtacgt tcattgccgg caatggcgt     480
tgtaacagga aaagttttca ttaactcctg ccattcaatg attaatgcat gatagggcct     540
atgaaatgaa cttactggtt atagtgggaa tataaataaa gtgagggatc caacattact     600
ttaaaagtca ccccaactgt ttatatttgg attctatgca ctgtgatcct aaggttaaca     660
gcatgaatta acatgcgtct ttaaaggact gtaatgaaag atcattgcat atttattgaa     720
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tggaagtaag aaaaatggca gtgatgatta aattgctgca gtccataatt tgggcttgtt     960
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cttatttgtc tcatacagcc atatagtttt tcctggaggg ttttgttttg ttgttgttga    1380
aaagactttg cttacagcta gatgaaactt tctatagaaa aaaaaattgt tgaaaggtcc    1440
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383

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agttctcagt accatgtgag ttaatgatac tacaactaag ttctttttaa aaagtgatta    1500
atgtatttta taaattacct tttcacatat gcaaaatctg tttctactac aatgttattt    1560
ttactaatgc cttattgttg cactcttttt gaaatatcct gcagtgaata tatgaatcaa    1620
tttgggctta aaactgaaag ccagttggct gaaaggtttg aaatacgtac cccagtaaaa    1680
ccattcaatc aataattggt aaataatatt ttaaaattgt ttttaatctg tatagatgac    1740
attttgtagc tttgtacatg ttgttaatta agggcatata attttacact caaagtataa    1800
ttgctgaact caggggtggg tagacttcaa aaatatgtct gctatagaaa taacttgaaa    1860
aaaaaaaaaa aaaaa                                                     1875
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<210> 657
<211> 1222
<212> DNA
<213> Homo sapiens

<400> 657
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ttgtattgtg tttgaactac tgggacttag tacttacgat ttcattaaag aaaacagctt     180
tctgccattt caaattgacc acatcaggca gatggcgtat cagatctgcc agtcaataaa     240
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aaacacagat atcaaagttg ttgactttgg aagtgcaacg tatgatgatg aacatcacag     420
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tcagccttgt gatgtttgga gcataggttg cattcttatt gaatattacc ttggtttcac     540
agtctttcag actcatgata gtaaagagca cctggcaatg atggaacgaa tattaggacc     600
cataccacaa cacatgattc agaaaacaag aaaacgcaag tattttcacc ataaccagct     660
agattgggat gaacacagtt ctgctggtag atatgttagg agacgctgca aaccgttgaa     720
ggaatttatg ctttgtcatg atgaagaaca tgagaaactg tttgacctgg ttcgaagaat     780
gttagaatat gatccaactc aaagaattac cttggatgaa gcattgcagc atcctttctt     840
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gagattactt aagactgtgt cagtcaacta aacattctaa tatttttgta aacattaaat     960
tattttgtac agttaagtgt aaatattgta tgttttgtat caatagcata attaacttgt    1020
taagcaagta tggtcttgat aatgcattag aaaaattaaa attaattttt cttttttgaaa   1080
ttaccatttt taaatacctt tgaaatatac ctttgtgtcc agtgataaat gtgattgatc    1140
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gactaaaaaa aaaaaaaaaa aa                                             1222
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<210> 658
<211> 2048
<212> DNA
<213> Homo sapiens

<400> 658
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atttgagtgg gtgtggacgg ggaggttggg aataaggaag agatggaaga ggagactaat     120
agaagatgtg cttttcattc agatttgttt ctcttttcct tcattcattc cagaaacttt     180
tattaactct actgtgtgca agatactgta ccaggctagc tgggaagaca aaacacctta     240
ggcatgccct taccctcctg gggtccttgc actgtctggg gaggcaggat tctggttgtc     300
taatgtctaa tgtggtaagc gctgtgaatg tatgcaggtt atgggaaggg aggatttgtc     360
tggggaaggg caggagggca tcctttggtc taaaggggaa gttggaatga attattcaag     420
tggagaggcc agggtagtag tgttagaggc aaatgaaaga gcatgcttga ccagagagga     480
tagagcctgt gtgcttagag ctgtcagcgt tttggccatt gtgccaagat cagtggaaag     540
acattgcaga ttttaaaaat caatgaaata ttttatacat tataaaatac atgtaagatg     600
taaaatggta tattgaacac acatattcac catctagctt aagaaatgaa acattaccta     660
taccattagc gtcccctgct taccctttct agtcttatcg ttcttctctc tgctttttttt    720
tcttcctcgc ttcttcccag gagtaaccac tagcctgaat tttctatttta tatattttttt   780
gctttttcttt ctatttttac tacatatgta tgcatcccta agtcatgcat agttttgcat     840
gattttgacc tttgggtagt aagaatcagc atggatgaat ctcacataat gttgagcgaa     900
gatgctaagt tggagctaca tatagtgtga aaccactgaa aggctttgca caggggagtg     960
acatttaatt tgtattttct aaagattact ttttatgcag tgtggataat ggattggagg    1020
taaacaaaaa tggatgggga gagcagttag aaggatgtta taatctaagt ggtaacttat    1080
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ggttgatggt  tgtaacctct  taagagaaat  catagacaaa  ttcttagcca  tagccctta    1140
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ctgttaaggt  cttttccctgt  tctctgtaac  ctgagccttt  catctcgggt  ctgcagagtt    1260
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cctctgcttt  ttgcctattg  acattttagc  cagccctcag  ggccctgcct  cagtctttct    1920
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aaaaaaaa                                                                   2048


<210>  659
<211>  1746
<212>  DNA
<213>  Homo sapiens

<400>  659
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attgttttga  gaaattctct  gatgttttttc  ttcttcaggt  ttcacgtgcc  acgatcatgg     120
tgccacggta  ctgcagtatg  cacccaaaca  gcaactccta  atctcgggggg  gtaggaaaag     180
acacgtctgc  atttttgaca  tcargcaaag  gcagctcatt  cacacgttcc  aggcccatga     240
ctcagctatt  aaggctctgg  ccttggatcc  ctatgaggaa  tattttacca  caggttcagc     300
agaaggtaac  ataaaggttt  ggagattgac  aggccatggc  ctaattcatt  catttaaaag     360
tgaacatgct  aagcagtcca  tatttcgaaa  cattggggct  ggagtcatgc  agattgacat     420
catccagggc  aatcggctct  tctcctgtgg  tgcagatggc  acgctgaaaa  ccagggtttt     480
gcccaatgct  tttaacatcc  ctaacagaat  tcttgacatt  ctataaagat  tggggtttta     540
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gttaggaatg  tactatgtga  acatgacata  tttgtagtta  accaaacaca  ccttcttagt    1260
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aaatgtttac  cagcaaattg  tcttatcatg  ttaatgagaa  tgttcaatgc  ctgtgtggta    1620
aatagtaaat  acaatggcat  aaaagtaact  ttctctgaag  atgtgatgtt  caggctgtga    1680
aatatatatg  taaagaaaa  ataaatgtta  tttgttagaa  aaaaaaaaa  aaaaaaaaa    1740
ctcgta                                                                    1746


<210>  660
<211>  516
<212>  DNA
<213>  Homo sapiens


<220>
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385

<221> SITE
<222> (426)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (443)
<223> n equals a,t,g, or c

<400> 660
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gcctcggcct cccagagtgc tgggattacg gtcatgagcc atggcgcatg cctatacag   120
tattcttatt ggcttaggtc ttttaactgg gttattactg cttcataatt ggtctccctg   180
cttccagttt cttccatcca tatcttccaa cctgacccca aaagtaattc tttcctcttt   240
aaaaaaaaaa aaaaaaaact cgaggggggg cccggtaccc aattcgccct atagtgagtc   300
gtattacaat tcactggccg tcgttttaca acgtcgtgac tgggaaaacc ctggcgttac   360
ccaacttaat cgccttgcag cacatccccc tttcgccagc tggcgtaata gcgaagaggc   420
ccgcancgat cgcccttccc aanagttgcg cacctgaatg gcgaatggca aattgtaagc   480
gttaatattt tgttaaaatt cgcgttaaat ttttgt   516

<210> 661
<211> 1671
<212> DNA
<213> Homo sapiens

<400> 661
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cttgagaatt ttcacagctt attttttcca gatcaagttg tgatacctat ttgtatgcac   120
aaatcaaaca aaaatccata ccaacttccc agtgaggtct ttcagatgct ataggattaa   180
ttttctttct tacctcacca cataaatatg ctcaaaacat ctctctgttt tcatgaaata   240
tcgtcatcat catcttagtt ccattacaaa ttatggtgct gcattagcca caaagctatt   300
catggggtat tggttgtgat tctaacttct tttcaaagaa ctatatacta tacatattgt   360
atggtgcttt tgagaattca cgattttggt gtttcacatc tagtggtgtt attacatttt   420
tcccctggta attccaccca cctaaatgga atatattttg ccactctgtg tatacctagt   480
atgtaacttg ttcagtaagt tcagatatat gcacttaact gggggattct aagctacttc   540
cccaataaaa accaatattt tctttccctc tcctttatga gttataaaac actttccctc   600
cccttcttct tttatttagt ttatatgcca gagatttttc tgctctaggg atgaaaatgg   660
aagaccaggg aagaaagttg atgaaataga gatgattcaa agatcggaaa tattttatcc   720
tcactcgata taaagtaaat tatttttct cttttccaat aaccatcatt tcccttgatc   780
ttggaatcat tcaaaaccta gccactgagt cctgtacaaa ctaatgtgct gtctcaagat   840
gagaagaaac atgaaatatt ggtagctgta cagattgtac tagtctgatt atatttacag   900
ttatgagata ccgcaaattt aagaatgcca attttttctc atcactgagt atttattata   960
tataacaaat acatgggaca ggaaaaacta tattgtgtga tataaatagt ttatttacat   1020
tacagaaaaa acatcaagac aatgtatact atttcaaata tatccataca taatcaaata   1080
tagctgtagt acatgttttc attggtgtag attaccacaa atgcaaggca acatgtgtag   1140
atctcttgtc ttattctttt gtctataata ctgtattgtg tagtccaagc tctcggtagt   1200
ccagcccact gtgaaacatg ctccctttag aattaacctc gtggacgctc ttgttgtatt   1260
gtctgaactg tagtgccctg tattttgctt ctgtctgtga attctgttgc ttctggggca   1320
tttccttgtg atgcagagga ccaccacaca gatgacagca atctgaattg ttccaatcac   1380
agctgcgatt aagacatact gaaatcgtac aggaccggga acaacgtata gaacactgta   1440
gtcctttttt tcacagtgtt gtccagtata accagcatca cacctgcaag atggctcctg   1500
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aggtatgtgg tgttctctgg cactttcttc taatttgtta gcattctctg cataatctgt   1620
tcttgcataa tgcccatctt cagacttagt agttgtagtt gtgctcgtgc c   1671

<210> 662
<211> 1356
<212> DNA
<213> Homo sapiens

<220>

<221> SITE
<222> (682)
<223> n equals a,t,g, or c

<400> 662
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gcactgttgt ttcatgcaat gtgagaacac agccagggga gaaacatcaa tgcaatcttt   120
atttttttat ttttatttt tttgagacag agtgagaccc tgtctcaaac aaaaacaaaa   180
acaaaactac aagagttata tatacataca tatttacaca tagacacaca tacatgtata   240
catgcatatg cacacagacg tacatgtgta tatctaaaat gatcttcagg aatgcacagc   300
agaccattag ggtagccacc tcttgtggga agaggggtgg cagatcttca tattttatt   360
ctagattttc ataatcatgt acaaatttaa aattaatttt ttgttgacaa aaccaggcag   420
taaggagagg cctacatagg gttgcatttg gtaggcttct cttcacatac tcttcttct   480
cattccctgt gtatctgaca catcctttca gaggggcctg actgtggagt gatgtttctt   540
cactgcctgc tcatctcctg tgactttctt gcgttccctt ctgagcctta ccaccttcgt   600
gggatgggtg tccctggctg aaggtgtacc tctgccatgt tcccctcctc cagtaccttg   660
gaaagtcccg gtgtgtcctg ancagcatgt ctccgagggg actgtctgga actctcatcc   720
ccacaatagg aagggttttt cagtcatggg ggaacactgc gttcctgtct gacctcctgg   780
ggttcctcat ttacgtggtc agtgagctgt tgagaggctt caggaagtca ggagtgagga   840
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ccagaatgcc tgttgacatc ttcgtgctcc accaagatgt tgggaagtgc ggctctttcc   960
ctggttccca cttggacttt ctccttaaat ctttgcagcc ctgggatttc cagctggttc   1020
catgcccatc catagcccac atagcctctc agtctgcctt ggcccttct cctacctcgg   1080
ccctcaaccc attcaaacaa cagacctggt cacctctgaa atttggtgtt aactccaggg   1140
attgattgct cactggggag caggggctag atccagccca cagtggtgct tgacggggtc   1200
acccatgttt aaaaacacaa cttgagccaa tattgggctc ttggaagata cttagagatc   1260
tggtttctta ttccataatc catgtgcctg tgaaaatggg aaaaagaaac tttgacaggg   1320
atagccatat gtttcaggaa aaaaaaaaaa aaaaaa   1356

<210> 663
<211> 880
<212> DNA
<213> Homo sapiens

<400> 663
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tcttcttcta ccatcaagga accattgtga aagggtcatt tttaatctct gtggtgggga   120
ttccgagaat cattgtcatg tacatgcaaa acgcactgaa agaacagcat ggtgcattgt   180
ccaggtacct gttccgatgc tgctactgct gtttctggtg tcttgacaaa tacctgctcc   240
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caaaagatgc attcaaaatc ttgtccaaga actcaagtca ctttacatct attaactgct   360
ttggagactt cataatttt ctaggaaagg tgttagtggt gtgtttcact gtttttggag   420
gactcatggc ttttaactac aatcgggcat tccaggtgtg ggcagtccct ctgttattgg   480
tagctttttt tgcctactta gtagcccata gttttttatc tgtgtttgaa actgtgctgg   540
atgcactttt cctgtgtttt gctgttgatc tggaaacaaa tgatggatcg tcagaaaagc   600
cctactttat ggatcaagaa tttctgagtt tcgtaaaaag gagcaacaaa ttaaacaatg   660
caagggcaca gcaggacaag cactcattaa ggaatgagga gggaacagaa ctccaggcca   720
ttgtgagata gatacccatt taggtatctg tacctggaaa acatttcctt ctaagagcca   780
tttacagaat agaagatgag accactagag aaagttagt gaattttttt ttaaaagacc   840
taataaaccc tattcttcct caaaaaaaaa aaaaaaaaa   880

<210> 664
<211> 1003
<212> DNA
<213> Homo sapiens

<400> 664
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gcagcaaaat gtcattctgt ttccagctgt tgctaggtgt tgcaatgtct cagcctcagt   120
ctctgatttc tccggtttcc ataactaact gcctacactt aaaagcgttt ctttacctac   180
tcattttccc tcaggccttt ccattttat cttgtatttt tccactcttt tggcagacct   240

387

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gcatgggcaa ggacgtaacc cttcacgtct cagcaagcaa ccccgctatg ctactgtacc      300
agaagtttgg attcaagact gaagaatatg tattagattt ctatgataaa tattacccat      360
tggagagtac agagtgtaaa cacgcattct ttctgaggct ccggcgctga tgcgaataca      420
gctcacagag aaacgcatgt gctattggag aacaggtctt tgtggagatc taaaggcagt      480
gattgatttc acagggagct ctaatctctg tgattacatg gtccttcaaa ctcccaacca      540
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tccagtcctt cctggagatg ccttcagcca gcatcccaga ctccacagtt atttatgaat      660
gatgtcgtga ttctccctcc acctgacagt ttgtaagagt gaaagagcat ctaacctgat      720
gctcttggag agagataacc tgtctgtcat aacttaaagg atgagaaaat gtggtgtagc      780
tattaaagat tcatgcagtc ccaaaaggca ctgtcctggg atgatgagag attataaggt      840
gatttcataa aaggaatcca accctgtgcc cggccattga tgtgttgtca ttgaatccag      900
gaggatttct agggcactga agttttgttg tttcttttgc tgactttggt tacagtcaga      960
aaaaataaac tagatgtttg tgtctaaaaa aaaaaaaaaa aaa                        1003

<210> 665
<211> 1061
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1056)
<223> n equals a,t,g, or c

<400> 665
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tttctatttg ctattttctc agaatttttac aattaaagat aaatcacaaa ctgtttgttt      120
ttcttaaagt tctttgagaa aatgtctaat tatacaatcc ttggacaata ctgtgttttt      180
ttggtgctgt gttttttaag aagtcctact tactggaatt ttgactattt ggatattttt      240
gtttttaaaa ggggagggga atttgcttaa tacttctaaa gatgtgaatt gataattgat      300
attaaaatag aattactctc aactcaccag aattaaattt tatatctgca tatttaacac      360
tattagctca tataaattat aagaaaaatt ttcaaaggat ctggtttaa ttttttggat       420
atgaaatgaa tttgcctttt ctgcctttc ttaagtacta ttttgtaact atattgcact       480
aactatatcc aaaacacatt ctgagcatca ctgtgagtaa cagccttcca gtttgtaccc      540
ttttgattca cagcatggcc ctatagttaa ttaagaggtg gataacttaa gctcacaact      600
gcctttaatt tgatttcaca tccacagtta taaactttgc atttaaaagg aaaatgagac      660
atttaaatag gttcctgttg tttcacatat aattggtaaa aacatattcc cttgtaggat      720
cctattatca gagcatcaaa taccaaagtc agcaacttgg gttgscaaat aaattaggct      780
cattaattat tttgaaaagg gctgctgttt ccatgtaaat gataattttc ttttcatgg       840
acaaggttat ggtacttatc tactaaaaga aacatgcata aacatagttt ttatctttaa      900
cttcagtatt aaaatatgca gtttttgca aagaggaaaa acatctggtc aattacgctg       960
aactctgact acatgtgggc cagtaataat atgaattgga cttaagaata aaccttgkgk      1020
ttaatctctt ttttttcctta aaattttaat gggagntttc t                        1061

<210> 666
<211> 1080
<212> DNA
<213> Homo sapiens

<400> 666
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caatcactca gggtaaacga tgatgctgca tgtcttttgt gccacctcta catttctcta      180
aaccatatta aaattgaaac caaaagcaca gataaaagca atgaaaatat gaattcactt      240
ttccatgtgc tggtctcacc tagtgcttct acttaaattt ttaatttatg ggaaatatac      300
ttcaatctat aattttttg taatttgaa atgagcgata tgaattttta ttgcattatt       360
gaatggccct tgtttaccta tcctttatac cttatttata aagtgcatcc tttataaagg      420
atgaagtgta tatagtgcat aaaagatata ctttataaaa tatatccttt atgcactata      480
tgcctccata gtatcaggta tatatttcat taggagatgc atacatattt atatactgca      540
atccaggcca ttatactgat ataggagaga agaggtcatc tatgtcagaa ttgttttcct      600
aacattctct aaatttccct agcttataaa ttacttcctt gcatttcaaa aaagatgctt      660
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388

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ttggttttttg tagataatat gggtcacacc agttctgctg agccccagtt gcatttactt        720
ctctaagacc tagattatat ggtttaccat agtgatattt ttcattgact caaaaatata        780
agagattatt tactcctaaa tatatcgtaa gatgttagct tcaatttaga aaactttatt        840
tgcttatatc cttattgttc caccttatta cttggccaaa actatggaaa tcagtcatat        900
ctcattccca agattaaaaa ttttaggaaa cctgactggg caccgtggct catgcctgta        960
attccaccac tttgggaggc cgaggcaggc agattgcttg aggccaggag tttgagacca       1020
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<210> 667
<211> 464
<212> DNA
<213> Homo sapiens

<400> 667
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cggcacggag gcaattcttg ggcaaggact gactctccaa gggtttgttc ttggctttgg         60
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gcttagttcc tcttgtgggg ctgcatttgc ggtgctttgc cctccccact gtgagtgagg        180
ggccaaggga tctcctcaat cctgtctccc cagcggctct gtttcctcct tctttccttg        240
gcctctgtcc tttgctgact tcctcttcct tacccagcag aactcaccct ggggtcgggg        300
cagtggggag gggcctatcc actgctcttc ctagtccttg gcagctggcc taggtgggca        360
gactatagga gggactggtt aggagtctgc attgctttga cttccctctc cttggttaat        420
aaacacaaat gcttgtttct caaaaaaaaa aaaaaaaaaa aaaa                         464
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<210> 668
<211> 1708
<212> DNA
<213> Homo sapiens

<400> 668
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ggcacgagct attccatcca agggaagcag aactgccaaa gactcaagtc ttttcatatt         60
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ctgatgccag catggtagga ggccacccct gaccacggct cagtacttgc cacctgctgg        180
cctgtctgac cctcaggtg aagcaggact gaggagtggc cagctctgga tagctggctg        240
tggagaggaa gcctccatgg gctgctttgg tctgtgggct ccttcattcc cttggtgata        300
atttcccttt attctgtggg attttttggtg gggttttccc ccctttttta tggagttggc        360
caataggatt gagttggggc tccagtagag aaggcagggt tggtggtggg tgggggcagc        420
ctgtatcaga caaaggtaaa tcagccagcc aggcacccac agcctcagct cctgtgcagt        480
tcctgggcag cacagtggaa gtgggagcct ggtccttccc ctgcccatgg agagctcttt        540
aagggatccc agcctgcccc tccacttctc tcccaagcca ggtcccggca tgggtgggtt        600
atgctcatgc tggcaatact tgaaacgggt ttattaatgc tgggtatttt gcacaatttt        660
atagacctct tttctacata gtctttttta aatggaagga gaaaatgtca gccacattac        720
tgtctgtgta gtgccaggtg aagggttatc agaaggctgg ttggtttttaa taagtttatt        780
ccaagagacc ttctggctgg aatgagtgag agtgtgtgtg catgtgtgtg tgtgttcatg        840
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tatgggaccc agtgccagga gctggaagac aaggtgtttc tgccaaacgg ggacctccat       1260
ccagagaaaa ggaagaaggt gcagggtggg ccaagaggca agtgaaggtt ggcctgagtc       1320
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agatattgtt ccaccatccc cctccttggc ccttcaagtg ggctgaagcc cttggaaagt       1440
gacataggaa gtccccagat cttgcccttc tcactccaga ggctagtggt cacagacagc       1500
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ccctgggcca tcactgcagt ggccctggga ggtgaggaag aagctggcta gaggaggggg       1620
ctcccaccta cctttattt aagccagtat tctttgttcc tgcttgtaat aaaacttcag       1680
tttataagaa aaaaaaaaaa aaaaaaaa                                          1708
```

<210> 669
<211> 603

<212> DNA
<213> Homo sapiens

<400> 669

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ttaccctctt ctcttccttg ggaatgtttg ggactggtgg tttaggggga agagtattct       120
gtccccacac ccacactgat tcagaatatc tcattcatgt tgtggacagt cccataacag       180
tgcagtgggg gaggggcccc aggttttttc ccttcctttc cccattatc tcctgtggcc        240
agaggctcca gccaacaata gcactcaggg ttcccagttc tgcattctcc aaatatggcc       300
tcacatagcc cccggcctcc tacaggcaaa gaaagggagg ttctatgcag ccaaagacat       360
tgagtcactt aaagaggttt ccctagaagg cctacacttc ctctttctgc ccctcccca        420
tttttgctcag tctggatctg ggaacaccgg ctatctgcta ggccctaata tagttaacct      480
tttccatggg tcactgttga atacttggca gaataatgat ctcacccact gatagatgag       540
tttcccccat tcttctggcc tccgccacat gatcaggaag ctggacttgc tcttatccaa       600
cca                                                                     603
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<210> 670
<211> 1415
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1085)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1196)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1337)
<223> n equals a,t,g, or c

<400> 670

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catatttttc ctcttcattt attttcatc cgtcatgaga tgaaaatttt gatttatgtt        180
tgtttattgt ccacatctck atttaatata ttcaggcatt cttctacttc ttgaacatat       240
agtttacagt tgcaataact attttaatat ctttgcttac taattccatc atctgtatca       300
tttcctggct tgtttctatt gctacatttt tttcctcata atgggtcaca ttgttctgtt       360
tattacatgc ctagtttttt tcactggatt ccaggcatgg tggattttac cttgtgttct       420
ggatatcatt gtatttttag aaatattctt gagctttatt ctgggacact taagttattt       480
ggagatagtg taatcctttc aagtcttttt atgcttagtt gggtgggaac agaacaaact       540
taactagggc taatgttgcc catctactga gtcaataatc ttatgattat tctactcgat       600
gtcttgtgaa gtatgtttcc ttcttagatg aaacataagt tattcctgct actgtgtgag       660
cccttgggat tgttccctct gcccatttta gttacttatt tttctgcttt aggtacattc       720
ctcacaaagc acgtgctgat actttcagta aaaccttgag ggaaccctct gcagatctac       780
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catggccttc aactttgttt cctcaactca gggagattgc cagcttccac ctgggtttct       900
tatccctctg ctccgtggaa gctgttaagt ggggagctat tgaagaagga cttacaatgk       960
ttgkttcccg tctctcargg attactgkcc tatgctggcc aatgtctaat gtgtaaagac      1020
cattgattta catgctttc tgkttattaa ttatttcarg cagtgggtaa atgkattcct       1080
attanttcac cttgctcaaa accctgscta ctcgktttta aagkttaagc tcaagcatta      1140
aatcctytcc aaagkgkttc atattccatt ttctattcag gaakgattkg tttgcnaaga      1200
ccacaagctc tttcaaaaaa gctgtaattg gccaggtgtg gtgctcacgc ctgtaatccc      1260
attcagcact ttgggaggcc ggggcaggaa gattgcttga ggcaagattg cttgaggagt      1320
ctctaactcc tcaagcngga gttagagacc aggctgggca acataccaag acctcatctt      1380
tgttaaaaat tgaaaaaaaa aaaaaaaaac tcgag                                 1415
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<210> 671
<211> 780
<212> DNA
<213> Homo sapiens

<400> 671
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tatacacatg gggggtggaaa ggccaggcct gcccccatct cgttggtgtg gctctgcgta        60
tactacacac tcattctcct gctcctcttt tcccttagtc agtgtccttt catcctgatt       120
cagctctgcc ttgcatcacc ctcagcctaa gggagtggga aggaaatggg gtgttttctt       180
gctgacctga ggctataggg tcacttgcca tttcctacct tctctggggg atttgagggt       240
agaggcaggg gaagatctgt tgttgcagtt gcttctgccc ccttgatcca aatgaccatc       300
atctctgatg gagatgggtt gggtacctgg ccttcatggc accttcactg ctagggatgc       360
tcaaggggca ggcctggggc ccttccctcc tgtctcttct cggtctttcc tctctgagca       420
gcctcctacc tcccctgcct gagccctcac tccacagccc tcccaggtac ctagcagagg       480
ctgtcagtcc ttggctcacc tggaacaggg ctggggctgg gttggaacag gtgtgtgccc       540
ccaccacagc tctatgactc tgttctccct ccctgccatt gtggactctt gtatttgagg       600
gacctcaaga gagtgaggac cctaccatcc actgtccata ttcagtccca gccccagtgc       660
gcttcctctg ttccctccct cagccatcca attcttgagt tttctcactg attggttttc       720
tttctttttc cttggattaa atgtgaaagc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa       780
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<210> 672
<211> 3334
<212> DNA
<213> Homo sapiens

<400> 672
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ggcacgagca cacacgccca cacgtgctta cacacacacc ttaacttttt ttgcacagaa        60
gttgtgttgt tcctggtcag tgtataacat tttttgcaac tttttgagtc actctggaag       120
acatattcac attcatgtgg cttaaactta ctccttgaaa gtcttggagg aaaatgctta       180
aaataaaaca aatttgagtt tgcgacatgg gccccttatt taactgcgga acaaatggtt       240
gttattttaa ttacctttg tttcattgta ttttaactca tgaaatgcaa gtgttactgc       300
tactggtagg ctttttccag atggaactaa gcctatttat tcttaaaaac atgaaaattt       360
agagccatgt ggccctctga taggtatgac caatttatca tgtaaatttc tttaaaacat       420
attaaagtta agtggatact tagaagcaag gtttaatttt aactctgtag tttctgggga       480
agcttgagga atctgcttac attatatatt tgaacacagt ggataaggtc tgaaaaataa       540
gacttcctag aaatgtttta gcaaggctta cataactaat acaatataaa tttagaattg       600
aaatattttg tgtatgatat caactgaatt taatcatgtg tctctttagg gttctattgg       660
agcacctgga attccaggga tgaatgggca aaaggtgagt tctatagaat attgtatttt       720
aaaaataatt tggtgagcat tgaaatcaca aaattattct agtccataat gttagtaata       780
agcttatatg cttataaaaa cactatgttt tgaaatacag gaaaattgtg ctacaaatta       840
ccaaattagt ttaattttta aagatgcatt aaatagtcag gaatcttgaa gatttccatt       900
tcaagtattt tggatgtgtt gctttttcata aattatgttg tgatacacta tatcctccca       960
taaataatat gaattgggaa aatttatgtt taacattgat agtgataaac aaaatgcact      1020
ttagtttatt ctggtcatgg taaaactaat atgtattaat aattggctaa caaaagttat      1080
tctcatagaa ggaactagtc aaactttctg aatccagaag gtagctcttt tcactgttaa      1140
tcaaaagtag aagttaaata gatttgtccc gctttggtat tacatacact tttattgtac      1200
tgttaataat gagaggaaaa agtaaagtga aagaaacaac acagtctaca tacacatatc      1260
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gcagctgaca aagcccattg ctgagccggt ttgtcaggag ccaggaagct gagcgaggga      1440
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ctcaaccctt tcaggtgcaa taaatactcc ttgtgtcctt ttccattgag tccatctttt      1620
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gtttctcatc tgtaaaggga gacaatggca gtgcctacct aatagagtca atgagagtta      1800
agggagtaaa tagatgtaaa gcccttagac agtatttgat attaccatta aacttttcct      1860
tcacttcagt taagtgaaat tccaaaaatt cagttaatct atgtttttaa gaggctctgt      1920
gttcccagaa gtactcaatt accccatgaa attaatgttc tcagccaaag cttatggtgt      1980
cctttagtcc ataaaccaaa caccgcacac tcgccagcag ttaaccgccc atgtcgcagc      2040
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391

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tacattttcc acttagtaaa atgcatatcc atttgcttca caaatcctgg caaagacaga   2100
atatttagaa tattctgttt agaatattgc agatcatgga gggaaaccta agcaaaaatt   2160
taaaagtgta ttcattctca gatggatttg aaaattatat aactcaagat aacatttaga   2220
aagaacaaaa tacagatatg gcataaatgt tgttttttgac attggtgaga aacaaaactt   2280
gtatgcctaa gattaataat gttttccttt ttcgtctttg tttctttttca ttttttcagct   2340
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tcacatacac tctttcaaag actgcatatt ctttattttt gcaaaggaaa tatgcaattt   2460
ccttagcaag agaaaggaat gtgacatttt cttgtcctag tcaccaagtt taaattatat   2520
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agaagtgttt tctgtaaaac ccagggaaac gaaatgattt cacacttta tgaaggtatc   2640
agcaaaatgt aatttaaatt tgttttccct ccttcagaga attgaaccta aagctttgtg   2700
tatggaactt ctgttaggtc tagtaattac ttaacatttg taatatttgc tatatcattt   2760
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agtaagagca cctcaatatc cttaaactgt cttgagaaaa catttttcttc tccattacaa   3060
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<210> 673
<211> 918
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (886)
<223> n equals a,t,g, or c

<400> 673
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ctgatttttc ataactctcc ttttattaaa aaccttgggg aagagaacaa aacattccac    180
attgacctta gtgagttgtt cctaggtagg catgatgaaa atgcaaaact gaaccccaaa    240
tctagccaac tgaaagacat tgattttct agaacagcac cttccaaaca ccagtctgtg    300
gaccagtcac tgcttgccca agacaaagtt ctcaccagcg tgaggtaaaa tgaggaaaat    360
aacagcaatg tgtctaaatt cattcaacct aaagacttcc tttcattctt tattgttgtc    420
cttcctattt ctttgattat ttgaacatct ttacttctat aaaaggaagt tgccagcaga    480
tggtagttgt tctctttaaa cgtttctact tagtgaagtt aacatttaac acacacctat    540
gttggtcctc ccacacccac tttattttt tctcatccgt gaaaactaga tatctagaaa    600
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acttttgttt tgaacatgtg aaatacaacc ttttctggat aactctatca tgatcaataa    780
tcaatggcat tggattagaa tacagtgaat ctgctggagg gcaaatatca tagggcagtt    840
ttccagaacc agaatcgccc ccgggccacc attctttttag caattngatt ctgtctcctt    900
aaaaaaaaaa aaaaaaaa                                                  918


<210> 674
<211> 3193
<212> DNA
<213> Homo sapiens
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<400> 674

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ttaatcctct ttctgcttca cactaagtgt gtcatcttgg ctaaatcact tggtctttct     180
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cttgttctga tatgtccagt actcactgga aaattggatc tataactgat gggtttagta     300
atctgctcat ttcttgctct gaaaattgta gtcagcaaaa gagatcatgg aagaaatcac     360
tgtaatggta gtaatagtaa cacatgcsat ttgtattgtg ccttaggttt accaggtgtt     420
tccaaataca ttagcatatt tsatatgtgc aggactagat accttgggac ctgccacact     480
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tatagagcaa gagaaaataa tattattata tcttcctttg cctaaaatct ctccacttat     660
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gccaggtctg aaacttgatg tgctatccag acacatatga tcagaaaaga tctagagtgc    1260
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aggaattttt cagaatttta agaaagggga agttcctctt ggaaaagata tagcaaccat    1740
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ttctggacca tttcaagtgc tggtgagaag aaaggaactc tttgcctgaa ctgggcttgg    1860
ttttccaagt gctgctttgg aaatgaagac ccagagatgc agagcttatg gtagttcata    1920
aatcttcatg ttctattatc tttcatctgc caataaagtt cattttcaat aatgtccacc    1980
attgctgtgc ccagaataac cacaggcaaa catcaaaaca atacgcataa gttagacaag    2040
attaaatctt gtctgatatc tgcacaaaca gatatgcacc atgttggaaa catgtgtttt    2100
cctagtccca tccaggcttc ccacaagaaa gccatgatgt gggtctaaac catatgtttt    2160
gagtaaagga gaatagaaga aggggagtgt ccgcaaaatg gaaagagatg aagatgttcc    2220
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gtaaatgttt tcaagagctg aattgagaag gaaagagact ggagtggtta atggtgattt    2580
gatttctggc attctgagtt ttctgctaca attagctgca ttacttggtg ccaaagagca    2640
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agaacttaag gctcacaaga tgttacaaaa atagtagagt ggccttaccc tagatccagt    2760
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aacaggaaag atactatctg gataaagttc tacagtttta gagagactat taacacatta    3000
atgtgttcct ttgtcatgag caataccctg cctacactgc ttctaaattt tctgatttgt    3060
ttggctgttt ggcatctgaa acaatccaag acaaacttag aaagattagg caacacaaaa    3120
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ggatggcttc ctg                                                       3193
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<210> 675
<211> 1859
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (917)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<400> 675

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cagtagtctt gggtaccact gcccccacca taccaccatt gtaaagtatg gactcctgct     300
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ggtatgactt tacctgcaca caagcttaca tgtgccctgt catatatggc tacacgtttc     420
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tccctggggg ctttattcc cctccttgaa gccccagttc aaggcccagg aacaaagggg      720
aaaggtaact gatctctctt ttggtctttc tctcccctca cttccacccc ttcacctgca     780
ggccctcctc tttgataaat agaggaaagc ccgtgggatc aggtacatat gtaaatactg     840
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ttgcttccat ctcaatgtcc attccattat tttgtagcta caataaagaa acatgggcag    1740
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaa     1859
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<210> 676
<211> 2867
<212> DNA
<213> Homo sapiens

<400> 676

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ccactcattg gtgccctgtc tgatgtgtgg gggaggaagc cctttctcct cggcactgta     180
ttctttacct gcttcccaat cccactgatg aggatcagcc catggtggta ttttgcgatg     240
atttctgtgt ctggagtctt ctcggtcacg tttttctgtta tatttgccta tgtagctgat     300
gtcactcagg agcacgagcg aagtacagct tatggatggg tctcagccac ctttgcggct     360
agtcttgtca gcagcccggc cattggagca tatctttctg ccagttacgg agacagcctc     420
gttgtgctgg tggccacagt ggtggctctt ctggacatct gcttcatctt agtggctgtt     480
ccagaatctc tgcctgagaa aatgagaccg gtttcctggg gagctcagat ttcttggaaa     540
caagcagacc cttttgcgtc gttgaagaaa gttggaaaag attctactgt cttactaatc     600
tgcatcaccg tgtttctttc ataccttcct gaagctggac agtattcaag tttttttctc     660
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<center>394</center>

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tttggatcac aggcctggat gatgtgggca gcagggaccg tggctgccat gtccagcatc      900
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gcccagggga tcataactgg aataagagga ctatgcaatg gcctggggcc agcactgtat     1020
ggcttcatat tctacatgtt ccatgtggaa ctgactgagt tgggcccgaa attgaattct     1080
aacaacgttc ccctgcaggg agctgtcatc ccaggcccgc cgtttttatt tggggcatgt     1140
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gagcctggga atcagtgcac tgagctgtaa actcggcaga aagtgggatt ctgcatacgc     1380
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cctcctcctg ttttttttt tctcttacat tctttttttt tttcctgttt atacattaga     1560
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gttctgctat gaacagagat aacatatctt tttactatgc tattggtttt taggttaagc     2820
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<210> 677
<211> 1875
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (334)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (966)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1304)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1319)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1329)
<223> n equals a,t,g, or c

<400> 677
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ttaagtggtt tcatgagatg gaatctactg ctggtgaagt tgctgtgaat attgttgaaa   180
tgacagcaaa ggatttagra tattacataa acttggttgg gcagagtttg agaggattga   240
ctccaatttt gaaagaagtt ctgctgcggg taaaatgctg tcacacagca tcacatgcta   300
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aataaattgg cacagccact ctagccttca gcaaccactg atcactcagt tcagcagcca   420
tcaacatcaa gacaagaccc tctaccagca aaatgattac aacttgctga agggctcagg   480
tgatcattag cgttttttag caataaagta tttttagata taatgctatt acatgcataa   540
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tgtgtaactt gctttattgt gatacttgct ttattgtggt agtctggaac agatcctgca   660
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agaagctctc tgtgttcctc tcagtcacgt tcccccaccc caactcctac ccaaggtaac  1800
ctctcatcct gaagcttaca tggaagattt gggcattttt attaaaaaaa aaaaaaaaaa  1860
aaaaaaaact cgtag                                                   1875
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<210> 678
<211> 1651
<212> DNA
<213> Homo sapiens

<400> 678
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tttgttaaat tataagggaa agtttcacat gcagcaaaat aatacagaaa atgtttttat   180
aaatttttat aaaacttgaa tctttaatgt ttgttttttac catttactgt attgttggtc   240
tttttacatt tggccatagt tctatgaaat gtaaactttt tcaggaaagc catgaaaaat   300
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ttaaatatat caatttgttg actggctgaa atttaagatc ctttcaatga taatcatatc   480
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ttccagctcg tgctatcctg gaaaaatctg attttactat ggattgtgga atttgttatg   900
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396

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gaaggaaaca ctgaaataag aatacaacat ttcggtgaag agctggaaac ttaaaaaatt   1140
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<210> 679
<211> 2292
<212> DNA
<213> Homo sapiens

<400> 679

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aaaaaaaaaa aa                                                       2292
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<210> 680
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<211> 3560
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (380)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<400> 680

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acccagaagc cctcagatgt acatacacag atgccagtca gctcctgggg ttgcgccagg    2160
cgsccccgct ctagctcact gttgcctcgc tgtctgccag gaggccctgc catccttggg    2220
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tttttttttt taagtttgtt taattatttg ttaagattgt ctaaggccaa aggcaattgc    2460
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398

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attttcatc cgccggagac actgctccca tttgtggggg gacattagca acatcactca     2760
gaagcctgtg ttcttcaaga gcaggtgttc tcagcctcac atgccctgcc gtgctggact    2820
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gttgctgtac acagatgcta cagacttgta ctaacacacc gtaatttggc atttgtttaa    3480
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<210> 681
<211> 1902
<212> DNA
<213> Homo sapiens

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agtctgtgtt ttggcagaca ttacaaatgg aaatactttc tagaagatac ttaaaattct    180
ctttatgtga caaataagta taatatattc aatttatttc catgttaaat atacaaatct    240
tatgaagttc aatatgtgca aattttcac atctttctcc ttctctcact ttacctcttc     300
tccctctttt aaactttct ttctccctgc cagagtgaac cttatactaa aaaattacaa     360
gttttgatct gatcctctct cataccccat gtttgattca gagctgtaga tgcctctgaa    420
tttgcgaatt tctcaaggga aaattaactt taagagcttt ctttatttca agcatgttga    480
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cctcgacttg tggtttagtc atgtaactag cactatgcca gtgaccgttg ttgccctgta   1740
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<210> 682
<211> 1538
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399

<212> DNA
<213> Homo sapiens

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tcatgtgccc tcttgctcct cttatttcag gagtgtgtgc tatccctctc tccaccagct   180
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cagtcttcct tggttttttga gtcttttaa acaagctcct accctgcttc tatccttta   300
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aatttgaaga gcactcttca gccaagttcm yttttatttt gttgttgatg ttttgagcat   420
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ttgagttttg ttaaatgtac tgaaatcttg taatgaaaat ccctttggcc agaaatgaga   540
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<210> 683
<211> 2148
<212> DNA
<213> Homo sapiens

<220>
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<222> (378)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (381)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (408)
<223> n equals a,t,g, or c

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ctgctggact gttttccaaa ttaacattct cattagtagt gtatgaggag tctaatttgt   180
ccaaatcctc accaacgctt gctgttctct gttcttttga ttataaccat cctaatgggt   240
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cctttgccca ttttaaantt ntattattta tcttttttata attgaggngt aagatttctt   420
tgtatacagt agtcctccct tatccagaag ggaaatgttc caagaccccca gtggaagcct   480
gaaaccctgg atagtactga accctatata tattgtgctt tttctcatac atacttactt   540

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ggagaacaat tataacaata catcagcatt actactcttg cactttgggg gcattataaa    720
gtaaaataag ggttacttga acatagcact gagatatcac aacagttgat ctgataatca    780
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ggtggtacac acctgtaatc ccagctactt gggaggctga ggcaggagaa cagcttaaac   2040
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gaataagact ctgtctccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa             2148

<210> 684
<211> 2608
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2598)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2608)
<223> n equals a,t,g, or c

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tactttcctt atatttata tagttctatg actgttgaaa catcaaggag ttaaaaaaat    180
cttaatattt catgattaac tctaagtact attaattaat agcttgcgaa atattagcaa    240
ttttcccatt atggactatt ctctctaaag caagagagac tagcattccc agacatcatt    300
ctagggtctt taagctcatt ttgggtckgc taaagtttgg ggggaaatgt tacgcaaagt    360
gatactgtgt atgttgccat tttgctttat tcttctgttg aagcaaaatt gtggggtttk    420
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atttatggtt taagtttga tycttaggta ttttctccag ctctgacatt gttttccaaa    540
gacacactaa actgcattgc acagttcaaa atttgattac ttaagggatc aatctaggtg    600
gtgttcttgg tcttaaattt aacagcaaac acagcacata tctattatca ctatattaat    660
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gaaacttaat gtctattaat aatttagta caaaatttca taaaccgtgt ttttcaaaat    780
aagtttatgt caaatccagc ttcccagaaa cactaataat taagtacatc aatgtactaa    840
ataaatcatt cagttgcacc catggggaag attgtgttac tgcccttcac agtgaaaaaa    900
agaaaaatct ttcattttta aaattaggag atgttacgta acttggcact ttagtagtgt    960
atacactagc attagtttat acaccacttt tgccgctggg gaattcaagt tgaaatgtcc   1020
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401

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ctcaatcata taggtctgga atacatcttt cattcataat ttctgctcag ataattgaat   1080
agtttgccat cgagattatt ttcatttata ctataaaaca aaagcaaact agtccagttt   1140
aattttttgt acttagaata ttgcacattt tctatatatg agttattcag attagtatct   1200
atgtaggttc agtcagatcc aaccatggat tcgaggtatt atactgtata accctacaaa   1260
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aaaaaaaaaa aaaaaaanaa aaaaaan                                       2608


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<211> 1642
<212> DNA
<213> Homo sapiens


<400> 685
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gaatctatca cagtgaaaag ttctaacttg tttttgagaa gtcagtacag caggggaaaa    180
catatgtgat gcaattaaca tctgcataat ttcacttaaa attattatgc aaaaatgaat    240
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402

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aaaaaaaaaa aaaaactcga ag                                              1642


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<211> 1783
<212> DNA
<213> Homo sapiens

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aaaatgaaca caggatatga ttcttttttt gcttttgctt tggagttgta tcagctctgt     180
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403

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<212> DNA
<213> Homo sapiens

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<222> (2673)
<223> n equals a,t,g, or c

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405

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<211> 1054
<212> DNA
<213> Homo sapiens

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<222> (567)
<223> n equals a,t,g, or c

<220>
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406

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<212> DNA
<213> Homo sapiens

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407

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<211> 1606
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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409

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<212> DNA
<213> Homo sapiens

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411

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<212> DNA
<213> Homo sapiens

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413

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<213> Homo sapiens

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414

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<211> 2721
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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415

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<213> Homo sapiens

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416

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<210> 704
<211> 1589
<212> DNA
<213> Homo sapiens

<400> 704
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<210> 705
<211> 3161
<212> DNA
<213> Homo sapiens

<400> 705
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caggtatcaa taaggaaaat ttccagagcc agaagaagga aggaactgtc agggaacaat    180
tagtgtgatg ggaaactatg ttatgcttcc tcagaaagta tgacaaatat gttacattta    240
cttgagtttc tggaaactgc acatgaggga tatagcatta atttcctttg tcttgttggt    300
atctgtttta ccattcatga agaaagaaaa aaaatgagag aaaataaaag gtctcagaac    360
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417

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tcacagagta aagatatttt tctaattgaa agtcaaactt cagagttgta attctctgtt    420
aaagtgggtt ttggttaaaa attattttct gtaaactaat tttataggct attcctatct    480
gtctgttcat tagcacagtt ttggggtcag caaattattc cttatagttt aaaaatattt    540
tttataatct ttgaaattaa caaactttta tttgatagct attttaagaa gttgttacag    600
gtgtaagact ttttcttctc taacaaagat gtgcgctgat agagctgaaa cacaatatct    660
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gcattttggc cagactgctc accctggaaa ttttaaccac tctctctctt ctgattgccc   2040
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gctggcatgt tatttcatgt tttaagtaag gcatttgtaa gttgtccatt taaatatatt   2760
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agtgagactc tgtatcaaaa aaaaaaaaaa aaaaaaaaa a                         3161

<210> 706
<211> 1409
<212> DNA
<213> Homo sapiens

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aaaggtataa ctgtcctggt gatgctgtac agaggctctt ggctcttggg gctcagcttt    180
gcctcaacgt ggcttcacgt ggcgggcacc ctggtcccca gagagagaac cagagctgtc    240
cgtcctgcag atggacacag gggagccaca gcacggctcg cgctggtgcc cagagagaga    300
aagagtgaag ctgctgaccc tgaaggcaag gcagagtctg ccatgcagct gcagatgtcg    360
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418

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aagctgccca tgaaagcgct ggtgtgaaaa agctgktaat gaaagcggct gctgaataaa    480
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cggaccgcag catgggctgg acctggaccc caggatctga aaaatgtatt tgttgaagaa    600
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aatacttccc agatggtgtg tgtacctcag ctgcaggacc cttatgcttg gttgttgccc    780
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cggggatgca agctgctgaa cgtaggggat gcaagcggct gagcatcaga gactacagat   1260
agacgcagct aacctcagac ggtgcagctt cagggaaaga tcaccttctt cccgcaccat   1320
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<210> 707
<211> 1931
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (6)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (184)
<223> n equals a,t,g, or c


<400> 707
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gggtgtgtgt ctctgttgga cctgtctctc ctcagtctat tcctgtcata gatgtgggtg   180
tccntkgtag ggaagtgcct gtgtggtctg tttacagtgc agaaggcggc tcagcagtgc   240
aatgggctga cagccttgga ccgggagtca gaagcctggg ttctggttgt agctctggcc   300
cctccctgtg atcttcaaca agccacttgc tttctctcgt cttcagtttc ctcaactaga   360
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tttttaaca ttttcattgc agtattgacc atcatccttg gttgtgtatc gtgtaacaca     1860
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aaaaaactcg a                                                          1931

<210> 708
<211> 2128
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2095)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2121)
<223> n equals a,t,g, or c

<400> 708
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gacaacattt tccagtcctt ctgagtaaat caaagagaag tctcagcttg gtgattgcag     180
gtctctaatg cttatttctc tgtctctgtc tctgtctctt ttaacaaaag tctaccagcg     240
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tttcattgtg tttatttta tagctacttt ctaattatag caagtgattc tgagtttcca     360
tttaggatag taataggaag tttcttttc aagtaaatgt gcataagtaa aaggagactg      420
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gaagggctgt gtgagcatgc aggaaattct gggaaggcag ctaaatgcag ttgctgcatg     540
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ccgggccaaa gttcctctcc ntaagtgg                                       2128

<210> 709
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420

<211> 2283
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> n equals a,t,g, or c

<400> 709
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tcaaagatgc cttcccatag tttcctagtt taggaaatca gtgatgacat caattgagct   180
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taaaggtaaa gaaaagaaca ttcgactatt ctaactttag gaaaacctaa gttaaataat   720
gatttaccta tgtgactcyc cactaatttt ctctkgcaaa tcatcacccc ttaattaact   780
gacayccccca aggcagtcaa ctcaagctgt agctttaacc acagaggtta aacaattcac   840
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cctagtttgg tgggagatgg agaggaaggg acctgttggc aaggaaacag ctgcttcctt   960
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tatatcaaca attgagagag tattgtttac ctgagtgcgc caaagttcaa caagccttcc  1140
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<210> 710
<211> 2742
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (778)
<223> n equals a,t,g, or c

<220>

<400> 710

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<210> 711
<211> 1294
<212> DNA
<213> Homo sapiens

<400> 711

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<210> 712
<211> 930
<212> DNA
<213> Homo sapiens

<400> 712

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ccaggccaag attgaaaaat gtggatcgga gtagtgctca gcatttggaa gttactgttg     180
gagatctgac agtcattatt acagacttta aggagaaaac aaagtcaccg cctgcatcta     240
gtgctgcttc tgcagatcaa cacagtcaaa gcggctctag ctctgataac acagagagag     300
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catttccaga cttaacattt tggtctctgc agttaagtgc catgaaaatg tggttgaatt     600
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gcaagctgcc taaatatgta ttatttgaga attgtgaaac agatagttat atgtatacaa     780
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<210> 713
<211> 1393
<212> DNA
<213> Homo sapiens

<400> 713

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gtgaaatatt caaggctctc cagcacagac gatggctaca ttgaccttca gtttaagaaa     180
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gaccgggccg ttccagtgct gatcattggc attctggtgt cctacccgg attttaccac     360
ctgcgcatcg cttactatgc atccaaaggc taccgtggtt actcctatga tgacattcca     420
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gttagctaat taggacaagc tctatttttc atccctgggc cctgacaagt ttttccacag        660
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<210> 714
<211> 1913
<212> DNA
<213> Homo sapiens

<400> 714
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ttttcagcct atttcacaac ccagcggttg aaatagttct tttaaaacat aggtcagatc        180
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<210> 715
<211> 2502
<212> DNA
<213> Homo sapiens
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424

<220>
<221> SITE
<222> (52)
<223> n equals a,t,g, or c

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acatggtggc aggcgccgtg gcagggatcc tggagcactg cgtgatgtac cccatcgact   180
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<210> 716
<211> 1276
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (788)
<223> n equals a,t,g, or c

<400> 716

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<210> 717
<211> 1279
<212> DNA
<213> Homo sapiens

<400> 717
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aattattatt atgaaccttc agcctacttt cttgagtgcc gtaaaagtgc ttgtaaatct  1140
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<210> 718
<211> 1086
<212> DNA
<213> Homo sapiens

<400> 718
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aatgatggag ccaggatttg accttagtca ttcctgcttt ggagtctgtc ctcttaatac   180
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attatatggc gtctctaatt tgtgagtgag tgaataagtg ttttgagatt ttaagtattt    240
ataccacttg tactccactt ttgctggagg gtggattcta ggcaggagtc tgggatgcat    300
tgaggatgtt aatgaattta gcaaatactc actgagcacc tgctttatgt cagggatatg    360
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actcga                                                              1086


<210> 719
<211> 1276
<212> DNA
<213> Homo sapiens

<400> 719
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tgcacctctc tttccatcaa actccactga tatgaaaaat gggcaacctg ttttttccttg   180
ccctgttagt gaacttgtgg gtgtacccag tggccactct aaggatctct ataatcaaca    240
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<210> 720
<211> 2757
<212> DNA
<213> Homo sapiens

<400> 720
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aggagagctg gggcgcccac gagaggatcc ctcacccggg tctctcctca gggatgacat   180
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caacatacaa agcagccact cactgacccc caggaccagg atggcaaagg atgaagagga   360
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ggggcattgg gcattaagcc ctgacctttg ctatgctcat actttgactc tatgagtact   480
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427

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<210> 721
<211> 1547
<212> DNA
<213> Homo sapiens

<220>
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<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1166)
<223> n equals a,t,g, or c

<400> 721
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428

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<210> 722
<211> 1614
<212> DNA
<213> Homo sapiens

<400> 722
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acaggaggat cccttaagcc caggagttca aggctgcagt gagctatgat catgccactg   1560
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<210> 723
<211> 937
<212> DNA
<213> Homo sapiens

<400> 723
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429

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<210> 724
<211> 1329
<212> DNA
<213> Homo sapiens

<400> 724
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<210> 725
<211> 2455
<212> DNA
<213> Homo sapiens

<220>
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<222> (894)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1330)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (2418)
<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<220>
<221> SITE
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<223> n equals a,t,g, or c

<400> 725

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<210> 726
<211> 834
<212> DNA

431

<213> Homo sapiens

<400> 726
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gagccctggt gaagggctgg acctgaccca tggaggcagg aggaagacct ggctttcttg   180
gtttgtccgg ccctgggggag cagccttccc tactcacttt ccccttgcgg caccaaatgg   240
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tgatacttgg cattagcatg aaacttgtgg gtgtgggagg atggagagag aactctaaca   720
caaaacatct tattaaaatt gtacttgaga gacaaaaaaa aaaactctgt tgtattttga   780
cagaattatt tttattaaaa tacacatcca tgagcaaaaa aaaaaaaaaa aaaa         834
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<210> 727
<211> 3371
<212> DNA
<213> Homo sapiens

<400> 727
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432

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aaaaaaaaaa a                                                         3371


<210> 728
<211> 1094
<212> DNA
<213> Homo sapiens

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atctacctcc atagagacgt acggctcctg ttctctagaa agtcaatgga ggttgatagc    180
ggtgctgcat atgaactcaa atcttacact gaatcaccaa caaaccctca gttttcacca    240
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aattagcata gaatggagtg taccaaatta acaatcagga gagtggattc tctcctgtta    360
tcctggacca gttttttatga aaggattcct gaaatgaaat ccatatattc catgtagact    420
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atgcccattc atagccagga ttccttatcc ccaaaacagt tctattttttc cttaatcact    960
actatagagt ctttacatta aattactgtc gtatgctaga taattttctc aaattgttaa    1020
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<210> 729
<211> 1243
<212> DNA
<213> Homo sapiens

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caacgagaaa acaaacagca gcagaagaag cgaaaagtcc aagataaaca gaaatcggta    180
tcagtcagca ctgtacacta gagggttcca tgagattatt gtagactcat gatgctgcta    240
tctcaaccag atgcccagga caggtgctct agccattagg accacaaatg gacatgtcag    300
ttattgctct gtctaaacaa cattcccagt agttgctata ttcttcatac aagcatagtt    360
aacaacaaag agccaaaaga tcaaagaagg gatactttca gatggttgtc ttgtgtgctt    420
ctctgcattt ttaaaagaca agacattctt gtacatatta tcaataggct ataagatgta    480
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433

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acaacgaaat gatgacatct ggagaagaac atctttccta taaaaatgtg ttttcaagct      540
gttgttttaa gaacaaaaga tagttctgca aattcaaaga tacagtatcc cttcaaaaca      600
aataggagtt cagggaagag aaacatcctt caaaggacag tgttgttttg accgggagat      660
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acaactgttt taagattagt tccatcactc tcatcctgta tttttaaga aacacaagag       780
tgcataccag aattgaatat accatatggg attggagaaa gacaatgtgg aagaatcata      840
gagctggaga ctacttttgt gctttacaaa actgtgaagg attgtggtcc acctggaaca      900
ggtctccaat ctatgttagc actatgtggc tcagcctctg ttaccccttg gattatatat      960
caacctgtaa acatgtgcct gtaacttact tccaaaaaca aaatcatact tattagaaga     1020
aaattctgat tttatagaaa aaaaatagag caaggagaat ataacatgtt tgcaaagtca     1080
tgtgttttct ttctcaatga gggaaaaaca attttattac ctgcttaatg gtccacctgg     1140
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<210> 730
<211> 818
<212> DNA
<213> Homo sapiens

<400> 730
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aaagtgataa gttttcttaa aaatcattaa atgctacctc ataaaataaa tatatatatg      180
aaacttgaag catttataga tttctgttgt tttcttgtag tgttaacctg gatacaggtg      240
gttttgatac atcttttctg tttgaagtag caggcttccc ctgcagtgta ggtgatggcc      300
acctggtggc acatcacact aatgcatgga gcttctcatt tgtcttcagg attctgaaag      360
taaagccaat gtttggatgt tatgggagct atgcatttca ttgtattgtt tcttgttaat      420
agttttagaa aatactcttc acattatagt tcagccatca aaaaaaattc acccagaaat      480
gaaggtacta gtattctcca tattgcagaa atcgtattta gaatttgctt taataagcag      540
tgagttatag agaacaggat tatgtagtta gaaaagctaa gaaaaatggg aaacgaaaag      600
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ttgctgctgt tttaactatt ttaataaata tattacaaaa tttatggcaa ttttaaatc       720
tttagaatta ttacctgcga atatctctta atgaatttcg ttagcttctc tttgaaaatg      780
gcttttgtg gtttttctta aaaaaaaaaa aaaaaaa                                818

<210> 731
<211> 847
<212> DNA
<213> Homo sapiens

<400> 731
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cagtgatgtc tggttctgac ttatttatgt attttttttc tatttgtttc tggcaatgca      180
cataataaga aatacacata gcaatattct tgctgttgtt gttcataacc actgagaaaa      240
aaaagcagca acaagtagga ataaaagaag cctcagccac agaatggcaa gaaacgttat      300
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gcgcctgtaa tcccagctac tgaggaggct gagccaggag aatcgcttga acctaggagg      720
cggagattgc agtgagccaa gatcgcatca ctgcgctcca gcctggagac agagcgagac      780
tccatctaaa aaaaaaaaaa agaaaaaga aaaaaaaaa aaaaaaaaaa aaaaaaaaa         840
actcgag                                                                847

<210> 732
<211> 662
<212> DNA
<213> Homo sapiens
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434

<400> 732

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tgcagtgggt gatgaatgct tgcctgctca gcacccactc cctggtggac tgggtcacat     180
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cagaggcaga atgatatggt ggttaaaagt gggctctggg acgagttttt gccactgtac     600
tccagcctgg acgacagagt gagactccat ctcaaaaaaa aaaaaaaaa aaaaaactcg     660
ag                                                                    662
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<210> 733
<211> 2254
<212> DNA
<213> Homo sapiens

<400> 733

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ctttagtctg ccttctatga atataagaca ttatttcccc agaatgaaaa tgtatatgaa     180
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acaaacactc tctataatcc ttaaaataac tccacaaatg gaagacatta tttccatttc    2160
acagatgagg aaacaaactc ggagttatca ggtagttgtc tgcctatgaa atggaagaaa    2220
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<210> 734
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435

<211> 1079
<212> DNA
<213> Homo sapiens

<400> 734
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gggactgtaa tgcatattac ttattaaaag catttttttcc cccaactttg atggggaaaa   180
gcatatcaac agatacctac ttttgtagat ggctataaaa attgttaccc aaaaggcttt   240
cttagagcaa attgtctctt atgattattc ctgcctgcct ccatgggatc tgtctttata   300
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tttaagttca caatgcttca tgtattggtt tattctggtg attttatttt tactttagga   540
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gattataaaa gaagacgcca gtcctataga gccaagaatg ttcacataac caagaaatca   840
tatactgagg tgattcgaga tgtgataaat gtgcacatgg aagaactcag caatcattgg   900
caagaagagc aagagaaggc agaggatgat gccgaaaaga atgaagaaag gcgatcagct   960
tcagtagatt cacggcagtc tggtggaagc tatttggatg ctgagtgttc acgacataga   1020
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<210> 735
<211> 2166
<212> DNA
<213> Homo sapiens

<400> 735
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gctcgaaatt aaccctcact aaagggaaca aaagctggag ctccaccgcg gtggcggccg   60
ctctagaact agtggatccc ccgggctgca ggaattcggc acgagctgca cccagccttg   120
ttcttccttt ttgaatgata tttttcaatga gtatttttga atgacatttt caagtctggg   180
ctgacagttt tttcttttcat cacttttaag atgtcagtgg ttaaatgttg tcttttttgct   240
tccatggttt ctgatgagaa gtttgatata attcttacct ttgttcatct ctatgtaatg   300
tttcttgttt gactgccttc aagatcttct cttcgtcttt tgttttcagc agtttgaata   360
tgactgggta ttgaatatga ctcagggtat tattttttctg gtatgtattc ttgatgttct   420
ctgaggtttt ggatttgtgg tttggtatct gtcaagaatt ttggaaaatt cttggctatt   480
atttcttcaa atatttcttt tgccttgtct ttttcccttc ttctaggatt ccagttacac   540
acatgttaaa ctatttgata gtgtcccaaa actcttggat gctctgttct ggtttgtttg   600
cttttaaaaa ctcttatttc gttgcggttc agtttggatg gtatctactg atgtgtcttc   660
aagttctttta ctcactgtat agagtatacc aatgagccta ttggaagcat cgtttatctc   720
tctaattgtg tttttaattt ctggcttttc tatttgatta ttatagtttt catgtctctg   780
atgaaataac tttctttttaa attatttatt tatttagaga tagagtcttg ctctctaatc   840
caggctagag tgcagtgatg tgatcacagc tcactacagc ctcaaactcc tgggctcaag   900
cgatccacgt gcttcagcct ccccggaagc taggtctaca ggtgtgtgcc accacacctg   960
gctttaaat ttttttttat agagaagggg tcttactgtg ttgcccaggc tggtcctgaa   1020
ctcccggcct caagtcatcc tcctgccttg gcctcccaaa gtgttgggat taccaatgtg   1080
agccaccgtg cctgacctga ataactttc tatcttgcat gttgtctctc ctttaactcc   1140
ttcaagatat taattatagt tatttgaat ttcctgtctg gtagtttcaa aacctacatc   1200
atattcgggt ctggtctgg tgatttcctt gtcttttaag actacttagt tattaagtat   1260
atatatatat atatatat atatatatat atatatatat atagacacac acacacatat   1320
acacatatat atacatatat atatatatat gtatatttta agtccttgaa cacataatag   1380
ctgctttaaa gtatttatct gctgtgtcca acatttggtt catcttggcc agtttctatt   1440
gactgccttt tttcttaact gtgcgtcaca ttttcctgtt tctttgcatc tacaagtttt   1500
tgattgtgta ctggacatta tggatgatat attgtaaaaa ctctagattc tgttatcttt   1560
ccttgaagag tattttgtc ctgtggaact caaatcataa attttgaaaa tcaaacagca   1620
acgatagact ataacagcca caaaacctaa aataattcat ccaaaaatcc agactggaag   1680
atgaaatgac actcttcgga aagcaactgc ttttattcaa gagctctgac agttgagaat   1740
caagatcaaa tcaataagat acagaagtgt agtaatcatg catgctgttt aaacacccag   1800
aagatagctc ttgattttct gtgaaaatta aggagaggtg ggccagtcca cctgttagta   1860
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aaaaatgtta tttaagtatt tctgaagatc ttttatccca agtgcctctg cttctgcctc    1920
aactctgtgc cttaaatgtt cccaaaacgg acagccaggc gcggtgctca cgcctgtaat    1980
cccagcactt tgggaggcca aagcaggcag ctcacgaggt caggagttca agaccagtct    2040
ggccaacaca gtgaaacccc gtcactacta aaaatacaaa aaaagttagc cgggcatggt    2100
ggtgtgtgcc tgtaatccca gctactcgag ggggggcccg gtacccaatt cgccctatag    2160
tgagtc                                                               2166


<210> 736
<211> 632
<212> DNA
<213> Homo sapiens


<400> 736
ggcacgagtt actcttcagt tctcaccatt tttacccttc tgcaaagtct cttgtaattc     60
ctaagtaatg aaatgaaaag tacaaatttc ttaaaacaag ctctgttctt tttcttctgg    120
aaaacttgtg tagtttgtcc tgtgtatctg tttctcatga ggagaccggc tttctgtggc    180
ccacgtgaac actgagtaag aaacaaaaga ctgtggtctc caggacacag tgtgtgtttg    240
tcctctgcca tggttattca ccaagtggag tccagcagtt taggaatcgg gaggtctccc    300
atgatgagtt gtcatcttct gaattgctgc aagtgacacc aaaggggccc ccctaccagt    360
ttctcacttc ccagtctcac tactggatca gctcttagga gccaggagag ttcactgctg    420
tggctaggat agaaaagggc agctagtgcc ccagggtaga tcttggaaaa tatttttgg    480
gaaaaatgta attaaggcca cccctaaaat agatactgta tctggctgta ctatactaac    540
agtgatttgc ctgcatgtgt ttgatagaga tttctaccat gtactgcttg gtgctggata    600
gtctatcaca gcaaaaaaaa aaaaaaaaa aa                                   632


<210> 737
<211> 1104
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (453)
<223> n equals a,t,g, or c


<220>
<221> SITE
<222> (781)
<223> n equals a,t,g, or c


<400> 737
ctgcaggaat tcggcacgag gtgagactct gtctcaaaaa acaaacaaac aaacaaaaaa     60
ttaccaatct tcaactatta tcaagtcatg attatgaaca ttaatcctta gtttgtgctt    120
ttttagaagt agtaaatata ggagtttggg ttggcatgca ctaatccaag catttaagtg    180
gagatttgga atgtgatggg cagttctaca tttattctct ttttttcctt tcttttattt    240
agtcctttcc tttctccctc ccccacaacc tccttatatt tcttcttcat ctactctcgc    300
ttgatatttt ctgcaaagcg ctgcctgggc cccttgacct cacaagaagc tctctgacga    360
aacgcttaag aaaaacaagg tattatgcat tatcctacac attctgcaat cgccctagca    420
atttagtaac tacagtccaa tttaaaccag gcntcaaggc aacaaaattg caccaaatgc    480
caactaattt accaaactta tagaaggaat atttgggagt ctattccctt caacccatct    540
gattcatatt attgactcat ttagaaaaca gaaagtgaac agagacaagt ttttaaggag    600
tttggtttca tgcaaatgac ttgcaattgc agcccmttat ttttatacca cgacttccat    660
tagtccatat cccctgtcag actgtgacca gtgtcaatgt tttcaaaagc acaccaggac    720
aggcatggaa ctcatcagcc tgtgtcaaag gtcgctctca ttaaggagtc aaaatgaaaa    780
nttcagtgtc tctaacacat cgcatagctc tccctggtac tcccacccc agtcctgaaa    840
tccagggcca gctaagcacc tccagctccc cagacattca aataagatca agatgacagg    900
gcaagaaat gaatagagtt cttacccggc tggacctcat aatctggtac tgattgaaac    960
aaccagaaag ctgtttgcca ggtcttatag caccattcc tgaggttaaa cataacatct    1020
caaaatgaag caattagggg tttctccaaa acaagagtct tcagtaatta aaaaaaaaaa    1080
aaaaaaaaaa aaaaaaaac tcga                                            1104
```

437

<210> 738
<211> 924
<212> DNA
<213> Homo sapiens

<400> 738
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ggcacgaggt caggttgggt aggagagagg agagtcttgg aggggctgct ccatgggggt        60
cacacctctc tcctgtgggt tttcgctggt gattgagttc tgaggcattt gctgcattga       120
ctgttgtagc tttaactcgt gtgcacgtgt gacacataaa gccccaagag aagggctgcc       180
tggctcagat gcacttccat gctgattata tgcatggggtg ttgaaagcag tgctggctga      240
gcagcgatcc cagtgcagtt tgactttatt ctttgctcaa ataggtgaag gcccacggtc       300
ccggcctcga aggtggtctc gtgggcaagc ctgccgagtt caccatcgat accaaaggag       360
ctggtactgg aggtctgggc ttaacggtgg aaggtccgtg cgaggccaaa atcgagtgct       420
ccgacaatgg tgatgggacc tgctccgtct cttaccttcc cacaaaaccc ggggagtact       480
tcgtcaacat cctctttgaa gaagtccaca tacctgggtc tcccttcaaa gctgacattg       540
aaatgcccctt tgaccccctct aaagtcgtgg catcggggcc aggtctcgag cacgggaagg     600
tgggtgaagc tggcctcctt agcgtcgact gctcggaagc gggaccgggg gccctgggcc       660
tggaagctgt ctcggactcg ggaacaaaag ccgaagtcag tattcagaac aacaaagatg       720
gcacctacgc ggtgacctac gtgcccctga cggccggcat gtacacgttg accatgaagt       780
atggtggcga actcgtgcca cacttccccg cccgggtcaa ggtggagccc gccgtggaca       840
ccagcaggat caaagtcttt ggaccaggaa tagaagggaa aggtgggttt catttaaaaa       900
aaaaaaaaaa aaaaaaaaaa aaaa                                              924
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<210> 739
<211> 1492
<212> DNA
<213> Homo sapiens

<400> 739
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agtttctaaa actctgtcat ttcaataatg ttataaattg aatcatacag tatgtaattt        60
tatgggattc gctttttttc tgttgatctc ttttttttctg agtcatctca gctgttgtgt      120
gtatcaatag ttcatttcct tttactgttt tgtttggttt aactcattga cctattgaag       180
gatatctggg ctcattccag tctgtgaata atgctgctgt ggacattcat gtgcaagttt       240
ttgtgtgaac attaagtttt catttcttta agataaatgc ccaggagtga aactgatggg       300
ttgtatgtag ttacaaactg ccaagctgtt ttccagagtt ggcggtacca ttctaatttc       360
ccatgacaat tttttgaaga gtccaagcta gttgctttag agtgcctcac ctacattttt       420
taattgtctg acttttttcct aatgacatca cttaatttgt tcctcaatct cctgaatttc      480
ctatagactg gaggttaggt ctggtggttt gattagattt tttaaaaaaa tatgacttca       540
tctgtgatgc tgtgtacttt atgttgcata acatgaaccc taagaacaga gtgagctgct       600
ggacagcaag tttcatgggg tgcagtaatt aacacaccac atagtataaa tctgaaataa       660
tgacaaatgt gttaagggcc ttgggatatt gggccatgta ctctgaggag acaaggtgag       720
gtgcaggttc ctgcccctaa agaactctat cttttgagat tagcaactaa cagtgtgagc       780
ccactaatag gatgtgaaag ttgtcaaaat caagttctgg tcattgtgtt aaaaatccta       840
acaaatagag ctggggaagg ccgtgaaagg acgattttca tgcacagatg tctgataatg       900
aggactatca ttaaaagact gcacaaaacc acaccttgca caaaggccat cacaacctga       960
cacacacaaa aaatacttct atgaggacat ttgcccagca actccctgtc caatgtccaa      1020
ctggcaacat ccttgttatt gatccttgta gccaaggata attctctcaa aacaatcatt     1080
tttgctttaa aaaccgttgt cttccttgac ctccctgtat atgcacatag tttactgtgg     1140
cacttgtatt cttattgcaa tgcctactcc tgaataaaca tcattttctt tcagagagtc     1200
tccctctctg ttatttaggc tgacaaggat atgccaagaa gtagcttgga tatagcagtt     1260
aactctgcct ttaggatatg tgtatgggga tataagagtt aactaaaagc tgacctttga     1320
gttggtcctt gaataaaaga agaatagatt ccaaaaataa gaggaataaa taatgatcct     1380
gagctaggag agtacatttt gcagcctttt ggtttccata ttaagaaatt cagattttta     1440
tgtacaataa agaagttctg gaattctcaa aaaaaaaaaa aaaaaactcg ag              1492
```

<210> 740
<211> 638
<212> DNA
<213> Homo sapiens

<400> 740

438

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ggcacgaggg accccaaaac ccaatgatcc tgcagcagcc cttgcagcga ggcccccagg      60
gaggggccca gcgcctcccg cgggccgcct tgggggtgac ttggggcctg gacgccaggg     120
agcctctgcg caagcagttt ctgtctgagg agaacatggc cacccacttc tctcaactca     180
gcctgcacaa tgaccacccc tactgcagcc cccccatgac cttctcccca gccctgcccc     240
cactcaggag cccttgctct gagctgcttc tctggcgcta tcctggcagc ctcatccctg     300
aggccctccg tctgctgagg ctgggggaca cccccagtcc cccctaccct gcaaccccag     360
ctggggacat aatggagctc tgagtgctgg tggacagtgc ccctcccacc ttccttcttc     420
cccacaacag aagagaccag cgactcccgc aaagggacaa ggttcctccc tctcctgcag     480
agtaggcatc tgggcaccaa gaccttccct caacagagga cactgagccc aacggagttc     540
tgggatggga ggggtgggtg catgggaagg gaggcatccc accccaaga agaactgaat      600
aaagattgct gagcaaaaaa aaaaaaaaaa aaaaaaaa                              638
```

<210> 741
<211> 944
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (864)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (939)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (944)
<223> n equals a,t,g, or c


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<400> 741
ctttcgcgtg ggcggacgcg tgggcggacg cgtgggcgga crsgtrgggg aaagggggact      60
tgtggtagtg gaccatacct ggggaccaaa agagacccac tgtaattgat gcattgtggc     120
ccctgatctt ccctgtctca cacttctttt ctcccatccc ggttgcaatc tcactcagac     180
atcacagtac caccccaggg gtggcagtag acaacaaccc agaaatttag acagggatct     240
cttacctttg gaaaataggg gttaggcatg aaggtggttg tgattaagaa gatggttttg     300
ttattaaata gcattaaact ggaattgaca agagtgttga gcatccctgt ctaacctgct     360
ctttctcttt ggtgcccctt atctcacccc ttccttggaa tttaataagt ctcaggcatt     420
tccaattgta gactaaaacc actcttagca tctcctctag tattttccat gtatcaggam     480
agaggtgtct tatgtaggga gggggcaagt atgaagtaag gtaattatat actactctca     540
ttcaggattc ttgctcccat gctgctgtcc cttcaggctc acatgcacag gaatgctaca     600
tgatggccag ctgcttccct ccttggttat catccactgc agctgctagt tagaaaggtt     660
tggagggatg actttt agta aatcatgggg attttattga tttattttca cttttgggat     720
tttgtggggt gggagtgggg agcaggaatt gcactcagac atgacatttc aattcatctc     780
tgctaatgaa aagggttctt tctcttgggg gaaatgtgtg tgtcagttct gtcagctgca     840
agttcttgta taatgaagtc aatnccatca ggccaaggaa ataaataat tgcttacctt     900
aaaaaaaaaa aaaaaaaaaa aaaaaaactc gagggggggnc ccgn                      944
```

<210> 742
<211> 408
<212> DNA
<213> Homo sapiens


```
<400> 742
ggcacgagtg aatctttcct tttttccccc ctcctccaaa tatataaatc tgtgctctca      60
catgtaatgt atttaatttt tggaaaattt aatgctatat agtaaatcaa gtgtgtgatt     120
taaagtaatc agatcacttt gattctttta agttttcaga atttctttt t tccacaggta     180
attttggaga aaataattac caattaactg ataataagca cgctgtcctc tgctgtaaaa     240
agtctgaata gatactgtgt atgtttttat gtccatgaac ttgagctact cgtgtgcaat     300
```

439

```
tatgtgtatg ggaatggagt agtgttcatg atttgtatct acatcatcat atggatgtat    360
atttattaat aaagtcatta ctttaaaacc aaaaaaaaaa aaaaaaa                    408


<210> 743
<211> 1687
<212> DNA
<213> Homo sapiens

<400> 743
ggcacgaggt ttcatgggga cagagtgggc agatggagag ttctgtggag ggagggaggt     60
gatggtcccg cattgctgtg actgcttaat gccagtgacc tgcgcacctg caatggtcaa    120
tctctgccct ccagcgggtg cccccatggt gccaggcccc cgtcatcttg gggtgcacag    180
cgcacgatgt ctcaccagga tgggatccgc tgagggttgg agcctcagct caggccaggg    240
ctgcacctgc ccccaccaca ccatacacac cttccccact ctgttcccca ttggccccct    300
cctcactcca cccatgctgt ctggcccctt ctcccccagg ttctgcaaga gcgggtgtgg    360
tgggcccact tgcagtccca gctcctgggg aaattgcagg ggctgctgga acccaggaaa    420
tcccagctcg ctgggcatct tgaactacca aaaaacaccc tcagcagaaa atgagagggc    480
aggaaggatg tcagcagagc ctctgtggac tcttcatggg aggagactct catgctgact    540
tgccaggagg caccccggaa gcccccagtc caggagtgac atgggaaggg tagttcagag    600
gcaggtttct gacccctctg gcctccatca gagccaccgc aaaaattcca cctgttaaat    660
aaaaacggac tgaggccgtg gtgcactcct gtaatcccag ccctttggga gccaaggtgg    720
gaggatcgct tgaacccagg agctcaagac cagcttgggc aacatagcaa gactccacct    780
ctacaaaaaa attagccggg tgtggtggcg tgtgcccttg gtcccagcta cccaggaggc    840
cgaggcggga ggattgcttt ggcccactgg aatgttctgc caggaggggg tagtttagag    900
cctatgaacc acggcaatga gcactgcgag cacggacaat ggggggctgg ggttggggtg    960
ggctccacaa cgctgaaagc tgagctatcc caggacctgg gaggtgaccc tgtggctgcc   1020
gagtttctct ctggatgcac accatgtcta tcaaccctaa ggaagggtcc ccactttgct   1080
gggagcctcg caggctgggg gcacatcccc aatccctcgg ggcaggctca gatcctggca   1140
cactgacatt gccagccact cctgggcact tgctgtgtgc cgacccagga ctaggagctg   1200
cacctgggcc ccaggatgtc ccctagtttg caaatgtgga aacttgagtc tcagagactt   1260
agggacattg gcctctgtga atctcagggc tgcttctcct gaggcctgaa ccaggcctgg   1320
cactgtctgc tgggtgcggg cccagccctg ggaggaccca gcaggggtgc tcagacctcc   1380
catcccatgg ctaacccacc gctggggagg aaacctgtgg acacttgcac tgaaaaatgt   1440
cactctctac aagtatgcaa gggagtcgga ccatctccca tcagacctgg acacccgccg   1500
gacaccacag cccctaacac tccggccagg tcgctccagg ctggcacagg tggcacccag   1560
ccagtcacac ttaaagcagg gtttccctgg ccttaccata ttatcactcc ccaaggaagg   1620
aaatgcgaat ttttaattaa gtgaattaaa tgctaattta attaagtgaa aaaaaaaaaa   1680
aaaaaaa                                                             1687


<210> 744
<211> 1266
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (641)
<223> n equals a,t,g, or c

<400> 744
gggagagaga aaaagaggga ggaagaaagg gaggaaaata gttaaacaag caagatgaac     60
agaaacaaat atctgctata ctctgaatgt caaaatggaa atagcctgtg taaagttctg    120
caaaaccata aatgtaatag atttatttta acaaggtacc aaagtactgt atgtttaaga    180
aatttatcat ttttcaactt cctaatttat ttctggatgg tgacatttta atttaaataa    240
acagcagctg acagtatgac actggagttg ttaatccaac tattcttgtg cctcatgtgg    300
gtgttaggaa ttaaacttac tatttgctaa gcagcttacc tgacaagagt cagatttttt    360
cccctaaag aaaggactgg cactgtagct gtatgcttta ttataaatga tcaatttgtt    420
accctcctat aaaacagtgg gcatttctcc gtagactact ctcatgtatc tggagaatta    480
gcattgtttc catctwccag aataagacac accacaccac acacrcacac acgcacacac    540
acacacacgt aaagctaaa attctaataa taaaactgat taactttaa acatctagcc    600
atgttctcat caaagcattc agctttagta gagatatagg nttattttta taatattcta    660
```

440

```
acattagctt aaatgtttcc taattttatc atgtggaatt accccctatc aatcacacgt    720
tttgagcatc ttcatttgtg atcctttgag aagggagtgt gtatatgttt atatatacmc    780
atatcaatac atatcattta cctaaattgg tagattgagt tgtcagagag agtttgatca    840
aaatatggca ggttgtttca aagatatggt tgttgtgtgg accagatcat tgctgagata    900
atgtagccaa atcacagact ggtaagctag acttttttcaa tcacatagag tctgtaaaat    960
acttcagaat ttaaataaaa ctccattgct catgcaaaac tcatcagata agttcaagga   1020
gtcaatgaca ttgatatttc aaaaactcaa cattggcttc acttgcgtta ttgacaagca   1080
tgtttcttgg atctctggga atttgtaggt ttgccctgtg gattttgact gttttcaaag   1140
ttctaatgat ttctcagtcg ttcttcttaa cttcagaaaa aaaaatgcat tgtttttctca   1200
tctttcctat gcaaaaccaa aataaaaaat tgattctttg ttttaaaaaa aaaaaaaaaa   1260
actcga                                                              1266


<210> 745
<211> 2902
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1059)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1064)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2902)
<223> n equals a,t,g, or c

<400> 745
caggcttcta atggtgatgc ttctacttta ggggaggaga caaaaagtgc ttctaatgtg     60
ccatcaggga agagcactga tgaagaagag gaggcacaga ccccacaggc tcctcggaca    120
ctgggtccat cacctcctgc cccatcatcc actccaacac caacagcccc tattgccact    180
ctgaaccagc ctccaccact tcttcgtsca acactgcctg ctgccccggc tcttcaccgg    240
cagcctcctc cactccagca gcaggctcgg ttcatccagc cccggccaac tttaaatcag    300
cctccaccac ctcttattcg ccctgctaat tccatgccac cccgtctaaa cccaagaccg    360
gtgttgtcca cggttggtgg tcaacagcca ccatcactta ttggaattca gacagattca    420
cagtcctcac tgcactaaaa attaaattgg acacagctgc agtaactttt caccccatca    480
ttataccagt gctcatctga ctgatgaaaa agaggaaaga ataatcattt ctagatactg    540
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agttcactag actaaaatgt tttacaacaa aaagcctcca gttagcctcc tttctagagt    660
atatgttcag caatgtgatc tcataaaagg aaaaacaaaa gatttaagta ttctatatac    720
caagtttttg ttttgttttt actgtattta ttttattgag gttctttata ttcctgcctc    780
ttcatagtca aggctcttag tacaggaata ttgacttagg aattgtgaaa actccttaag    840
tttcttaagt taaggatgtt tggcttttttt ctttaatttt ttaaaaacca tttyycctatg    900
ttaggagtgc aagaatagcc agcatttccg attttgacat atgttcattt tatgcatatt    960
taagaaatta tagctgcata tcccttcttt caaaaaatgt gctttttttt ttaaaggaat   1020
tttaatatat yccttttaaar gaaagcaatt taatcaatng caangcaatt atataaaacc   1080
acaaagaatg tactgaacct actaacccctt taacatacag tttagggtcc tagcgcagag   1140
tccttgttta aaggtcattg actcatcatc tgtcagtaat gagaggattg gaagaataat   1200
tttgcataca aatgaggact taatttgttg aaatataatc tctttaagtt ccttgaaaat   1260
ggagttggtt tttttgtttt ctaaatgcta tctgctttta actagtagtt gcctacatct   1320
ggggacttca gagaagaatt atattttgtt agttaagtag acacagtggt tatggaagca   1380
tttctttaca gtaccctttta cgtgtttggt ttctgaactt aaaattgccc tcatacttaa   1440
taatatggtc tgcatttaat atgaaaggtg ttttattgat aaatctattg tactatttgg   1500
atacatttgt gtattccttg cagccaacct gtattcgtgg gattggtgta gggttaaatc   1560
atcaacatta tttcataaaa taagaatttg ttctgtgtta tctaaagatg tatcagtata   1620
ttgtcacagt tgtgctgtta actaaaaatg ctgagacccc ttttttataga aaacaaaaa   1680
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441

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gacatcaagt cttcttaatt caacccataa tcattaagta cttaacaaag aatattttac    1740
aagtgatagt atttcaacaa tgtgtaatta atattttga tacagtgatt tcatattgga    1800
atcattattt gtgcaaaggg acagacagat cacttagatt gctatactag tggacatagg    1860
ctaaatgttt gcacattcac attcttatca cgtgtagaat acttcacaaa atagtcaaca    1920
tctaaggccc taatttatgt tttgaaagat catgtgttcc caaagtattc cctattgttg    1980
gctccacagc cttaaagtgc tatagattta aattcattga ttagtttaa tttttaattt    2040
tagactgtgt atttccataa ataccctacg tactggcata tttgaaactc tttttccagg    2100
ttaggtcctt ttctttctca ttgaatcatc ttaaatagtt cttggccctg aatttagctg    2160
atttaaaatt cttaatattc aagaatttat acttattttt tccttaaaag ccacagggga    2220
cagttaaata tcttaaaata tctaaaacat tttttaaagc acttagattg tcttacgtat    2280
gtgcatacta tacctttaca gcgtttattg tcttgtctct tgtcagtaga ccttcagtac    2340
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atattgtgat tcattaaaaa atctcttcta tcccagacat gggccaaggt gctgtatctg    2460
agggatgtgc tgtaatttga tttacatgca ttagagcaca cagtagaaaa acgttagctt    2520
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tttatataat ttcatgttct atgaggaatt tagtacctct tcactgtgaa attcgaaata    2760
atgattttta taaaagcaaa actagaaatc ttttaatgac aattttcatt aatttcaggg    2820
ttatcatttt tgagaaatct acaccaaagt ggttttttaa aattacmtaa ctaaaaataa    2880
accacaccgt ggggttacct cn                                            2902
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<210> 746
<211> 1328
<212> DNA
<213> Homo sapiens

<400> 746

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ctgtgaggtt tctggggagg cagagaggca gggactttgg ggccttagtc accatccatg     180
gtatcacctc atctcacttc ctgtgaggga cagggcctgg ctgatgtgat cccagctccc     240
cccagttcag gactgtcttt cagctccttt gccctggag gtggggctg ctggctgagg      300
aggggtcaag gtgagttcaa gaaagctacc tgtggaaaat ggaccaggtt gggggggtga     360
ttgcaaagtc tccccaaagc ctggctcctc atgctcagtg ccaggggcag aacactgggg     420
agccaggtat agagagcctt cctgtcataa ctgccagtcc tcttcctcca aggcctctgc     480
atattctcat gttcccctca cccatcatgc cagccacccc tatccctctt ctagcagggc     540
caagatgggg acagcagcag ccctctggcc ttgggatgtg atgataaagc aagcctaggg     600
ccagggtttg gggagcagag agagccaaga agttgaccac gtgtgatttc cagcccttcc     660
cactgggact tgacttccca ggtcaaggag tccgtctcat tctggctggt cgagtgacca     720
gaggcctgtg tgaatgtgtg cacctgcttt tcctgcctgg aatgtttttct ggctcagctg     780
cagcaacatc tgtgagccca gtgtctgccc tgtgtccctg ggctcgctcc aagtgcagga     840
acatacatgc agggcccaac atgatgatgg tgtgaagggc aggaaacagt cctctgaagg     900
agtggggagg tgggcagtct gcccccgcca ggtaccatcg cctcctgcca gcttccttag     960
accaggcagg gctgccatgg tgctagctgc aagtccatca gtattgaccg tctcgctcca    1020
tcttggtcct ccggagtccc aagtttcctt ttcatcaaat ctgacaagag agaagaaaca    1080
tgggtgtgct tggcccacag ggcctggtgg tgatggacct ccccgctccc tcaagctctg    1140
gatggctgca gtgttgtact agactttgtt caggctgttc tcatctcagt attgccccctt    1200
cctttcactt tcacacttca tctcattcct gttgtcactt tccccgaaac gaataaagtc    1260
tccccagctc ctgctgtgta ggctgggcag aaaccacaaa aaaaaaaaaa aaaaaaaaaa    1320
aaaaaaaa                                                            1328
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<210> 747
<211> 590
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (27)
<223> n equals a,t,g, or c

442
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<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (58)
<223> n equals a,t,g, or c

<400> 747
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cctaagggga ccaaaagctg gagctcnacc gcgttgncgg ccgctctaga actagtgnac      60
cccccgggct gcggaattcg gcacgagtcc aggtcttatt cagatttcac cagttcgtgt     120
gtgtgtgtgt gtatgtgtgt agttgtgcac tttaaccacc accataatat acagaattgt     180
tccgttgcca caaaggaacc cttgtactac ccacttattg tcacacctta tcacccatcc     240
tttcaccacc ttccctaacc cctggaaatc actaatcttc actgtaattt tgtcatttca     300
agaagttatg aatggcataa tatatgtgat acaaacatag catatgttaa cttttttgaga    360
atgggtttcc cctccacagt atgatgctct tgaattccat ccaagtttta ttatatgtac     420
cgatagtttt tcgtttttta acagattgct gtggatgtac cagttgtgtct gactgctcac    480
tcatctattg taggacattg ggttgtttct agttttgggc tattaaaaat aaagctgcta     540
tgaacatttg tgtataaaaa aaaaaaaaaa aaaaaaaaaa aaaactcgag                590
```

<210> 748
<211> 752
<212> DNA
<213> Homo sapiens

<400> 748
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ccggccgctc tagaactagt ggatccccccc gggctgcagg aattcggcac agcttcttcc     60
atggagctag aaagatggca tttggcctcc tctgcaaatc ccagctcaca attctacctc     120
cagggaaaga ctgaatgtac tgcctcagct ccattcaaaa acagttctgg gaaagattcg      180
gggtggcctg ctttgattat atgtgcatcc tcttctgcac ccccatctcc ttatttctct     240
gctggcttcc tggaccatcg cttgagccat gggtggagag actcctgaaa gaccatcaca     300
ggcagcccta actagactac ctgattgaaa taagcagcag ctttttcttgg ccgcaaaggg     360
gaatgctgct cacagaataa gagagcaggg cagagcttcc aagtgtctac acagcctttc    420
tttcccttat gtaaataaat taattcatta ttaacatatc tcaacracac gaatctgacc     480
tcttttaaat ttgggtggtg gaaagagact tagatgcaaa ttgtggtttt attcattctg     540
tgactttggg caaataattt accttctctg gaagcaaata tgttaatttc ccttttctat     600
aaaatgacaa tggaactagc atcttaataa ttttattgtg aatattgcat tatgtagcat     660
atttcaatgc ccagctcagg gtcagacaca agatagacac tcaataaatg ctgattttcc     720
tttcaaaaaa aaaaaaaaaa aaaaaactcg ag                                   752
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<210> 749
<211> 419
<212> DNA
<213> Homo sapiens

<400> 749
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cggcacgagc ctccaagccc ctgtacataa cctggagcgt gtgaccttca gagcttttca      60
ctttatgcaa aatggctcct gtgagggctg caagctggag ggtggtgcag gccttgggcc      120
acagggaggc gcctgtggaa tagggggagt tcatgcaccc cttttttccc cagagggggct    180
ggactcaggt tagtttgggg gtggggggctc ctgcactttg ccacaggcac ggggagggtt     240
ttctcctcac ccccctctgcc ctcccaactt gggttgtact ttctaagaag gtgattcccc    300
ctgcccttgc ccccttcccc agaacaaaac atgttgatca tgtgcaatat ttcttactgt     360
gccgagaagc cgcaatgagc gagattaaag ctgtttaaca caaaaaaaaa aaaaaaaa       419
```

<210> 750
<211> 949
<212> DNA
<213> Homo sapiens

443

<220>
<221> SITE
<222> (2)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (940)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (947)
<223> n equals a,t,g, or c

<400> 750
cnacaagtac aggttatcaa gtttgcactt aactatgcca aaaaaagttt gaagcgctct   60
attctcagac atgctgtatt attacttctc attcaagatt gaaaaatata aaggtatcca   120
aactctgtct taatgtaaat gtaactattt ttccttcaag tgttgactag ggagtcggtt   180
tctctcttaa agacactcac tgtacaactg aaagcagctg tcatatttct ggcaaaatgt   240
gtttacgtat ctgacaagtt gtacatttgt gtatgaactg acataaaatg tgaaagcctg   300
taagtgtaca tgtagtggtg tggtgttctg tctagaggat acaactgaat gttttttaatt 360
tgctgactta cagacacagg ctgtttacaa aatgctagct ggaaagtctg taatgttcat   420
gtcataactt ttagttaatt gccattgagc acctgttctg aggaggtgag atgtggactt   480
gtgcttataa actggagagt ttagtcataa tccctcctgg ctttgtgtga atagcttgct   540
cactttgctg gcctttgaaa tgtgttctcc gtgataagct atccatgtgt ttgtgataag   600
agtgcttgtc aaccatgacc atctttgagc cttcctagtc ctccacctgg cacagtattt   660
gaaatggcaa aggatgtgct tcatcctcta acagtgtaca ctcccagagc tgatattctg   720
gattttgact gtgcacattt cctctagttc atgtctgtag tccctataga atgatctgta   780
ataaaatagt atactggact gtgcatcaaa gggatgtaaa attacagtat tccaaaggtt   840
gaagttctgc tgttttgtta taatgcctga tacacatctt gaataaagtc ttaacatttt   900
tcttttaaaa aaaaaaaaaa aaaaaaacyc gaggggggggn cccgtancc   949

<210> 751
<211> 440
<212> DNA
<213> Homo sapiens

<400> 751
ggcacgagtg acttcgcctg tgatggactt ccagtgtgag cactggccag agtgaccagg   60
ctgaccagca ccagccctga tccagatgca gaggccagga tgtgggccca gccctgtgcc   120
aggaggctgg ctggaataaa gggatgggca ggctggcatg ggggcagccg ctgcccctgc   180
ctgggtgttg ctgtgtattc ctgccggcca ggggccactg ccaggaccac gcctcccttt   240
tcatatcccg attcttaagt tctgctattg tggtattctg gtggagaaaa aagaaccgcg   300
tggctgtttt tgaactgcct ggaacctaag accctgaatt cttttccccc ccaaggggaa   360
aatctatatg gaaaacattt attttaaaat acaggatgaa gtgaattaaa agatttaaat   420
gcaaaaaaaa aaaaaaaaaa   440

<210> 752
<211> 1504
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> SITE

444

<222> (283)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1396)
<223> n equals a,t,g, or c

<400> 752

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cgnattgcag gacatcgtgg tggccatgac ggcggtgggc ggctccatct gcgtcatgct      60
ggtggtcatc tgcctgctgg tggcctacat caccgagaac ctcatgcgcc cggccctcgc     120
gcgccccggc ctgcgcagac acccctgaag cgcgaggccg cccgcccatc tttgcgccac     180
ctgcctgagg gcgcctgagc tcccaggtcc tccgcccgct ctcctctcct cattcctgct     240
gcctccttaa gatccccgcg gaggaggacc tgccggcgac ggnttccggc actttggsat     300
catcacacgc cctttccagc cgggcgtcag aytcccagay tctggccccg gattggcccc     360
tgggyttgcg ytgctgtgcc agccgcatcc aagggytytc cccgctctcc gcagccttta     420
tagaggcggc cagggcatgg agccccttcc agcaagagcc atgggcactc cggctyaccc     480
cgcacctcca tcctgtgccg aattgtccca gacagaccgt cgccattgct cggtcactgt     540
gctttgcagg cctggggcgc akctctccaa gcctgtcctg ccccgcccca ccccactggg     600
cttaggttag cttcgtgcct tagtatctcg ggcccactgc aggagccaac accctctgct     660
gtccaggggg ggtctgtggc cctaagattg gccggcctct ccatgcatct ggccagcgtc     720
cccttggaga caccttcacc ctcaagcgct gcagaagcat gaggtgaggg cctgcagcgc     780
tctgtaccgt ttagggtgtt ggaccagccg ggagcctggc aggcctggcc cagcggccag     840
ggtgagtgtt ctcagacccc gggcagctgg tggttctcca gggccaggta cccctttttgt    900
gtgtgcgacc tctgactagg tccctgtggg aatggggcag atggcggcca tcaccactgg     960
gtcccagggc agaagcttag ataccggcct tgagcagccc gaccttccac cgctgcctgg    1020
atcccaagcc tcagccgacc caggggacct tggtggcaac ggtgtgactg acagcaccac    1080
ccctagcctt tgcatgccca ggggtcgaga gccagtatcc ggcccagaca atgccacccg    1140
ccatggaaga aaagctgacc ctgcccacct gctgcagacc cgggccccgg gccgaggttg    1200
ctttctgtga cgaccgcctg gtgacgctgg acaccaggag ggttatggca ctgccctccc    1260
ctcctggagc ccctggcact gaccacctgg acttgacctg actcctggtc actggccaaa    1320
cacccatcct caccccagcc accccgggcc ctggctggtg ccgtgtgaca cctgtagccc    1380
acctgtgtgt ctttsntccg cccacccctg cgtgcgccgg tcagcgcaaa cctggcgcca    1440
gtgtctaaat gtccatcatt ctcagaccaa aaaaaaaaaa aaaaaaaaaa aaaaaaact     1500
cgta                                                                 1504
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<210> 753
<211> 1635
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (24)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (34)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1615)
<223> n equals a,t,g, or c

445

<220>
<221> SITE
<222> (1630)
<223> n equals a,t,g, or c

<400> 753
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tgttaccttc ctgaggcctc agtattagtc gtgagcacaa agttttgaga cctttggcgt     180
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gccttagtag agggtgggac tataacctta gaggccagaa cttgatccag aagttgctgt     300
ccacagaagt gctttctatt tcatcatttt tgtttctagg gctctttttc tgtagccagg     360
tcttcccaag gattttagta tttgcattgg agttgaggtt tactctaatg atggtggccc     420
agctgtgccc agaggacagc caggcaggcc cygggaggga gtttagaaag acagtcctgg     480
tgaatgggct tcaagtggtc acaaagaggg tggctgtgag gtgaccccag acactgcaga     540
acgatgtgca ccctctgcgt tttggatgtc cttggaatgt gggagcctag aaataaccct     600
gtggatggaa ttggggcagc ggctgctgga gatctgtgtg ccttgccttc cttcagcagg     660
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tcctcagaga caaagaagag ggcagggagt ttgggcttgg ttttgaactt tcctttcaat     780
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aaaatgaaaa gtgttttaat gctgccataa aagggaggcg gggggaggga agggaaaata     900
aaggcatctt tccaagtact catctaattt aattgtcaaa agattgatag gccatgaatt     960
acttctccat ctcactaagg gttaaaggcg tgcaacccccc cactggctgt gtcccctgcc    1020
accgaagtga gtgacctgcc ctacaaccag gtgggaccac ctgtgctgca gtccggaggg    1080
gcttctgcag gaagcactca ccccccacac sttccccggc ctgagcttcc cctaccttttc    1140
gtcaccacct gagggcatga gcacaggcca tggggcgtgc ctggtgagtc tgcctgtggt    1200
tcaggcttag cctgtggtct cctgtgtgct gctgcccgca tgggatgcgc aggggaggcg    1260
tggggatccg caggagggtg gttgggatac accggatacc tctgctctca ttgcttgttt    1320
scaaatgctc tatggacatt tgtgtgctaa atcctattaa ataaaaaaga cgggttaaaa    1380
cccagatgct gtatattcat ttgtaattat gtataaagtg aagcagtttt aaactgtaaa    1440
gattttttc agtgtgtttt ctcgaatttt gccacaacat actggcttcg tattttattt     1500
atctttcttt ctagttacca gcttcagacc cttgtaaagt ctccctcagc cctttcaaaa    1560
aataataaat ttcctgtgaa gttaaaaaaa aaaaaaaaa aaaaaaaaa aaaanaaaaa      1620
aaaaaaaaan aaaaa                                                    1635
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<210> 754
<211> 2141
<212> DNA
<213> Homo sapiens

<400> 754
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cctggcattc aaggcttgcc ataatctggt cacacctctt attccagtct catcttccat     120
atttccagcc acacaccgat tcccagtatt caccatttct tgagttttca cactcatacc     180
cacccccaaa cattggctca ttgttcctcc cacatggaag gctccttccc agagctctgg     240
gtcttaattc cacccattct acagtgtctt tgaagtcttc gttcctcctt tcatttgaaa     300
gttgacggct ccttcctcta agcaaccagt acctctcttc aaatactcgg tattatgtgg     360
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ttttatacat tgcggccccc agtgcctggc ctgtggtgaa tgcccagtta acgtgcgcat     480
gaacaaccaa acgtgctcaa agctgccttt ctcctgccat gtttgataga agcactttgt     540
ggaattcttt cagtctgcgg atggaagact acgctgttgc ccagttcact gctgctttcc     600
tttcttacag gaattacaga aaggagaaag cactaactga agaaatggtg atgctctcag     660
tttctctgcc ttccctatca gcagaaaggc tcggggaagg ccctcagcct cccagtctgg     720
tgaagcttcc tgtatggtcc atgaccgtat tccaccccag gctctgggag gctccctgag     780
atgtgctgtc cactaagcac tgcacaaaca agcaatcaaa ttatgaataa acataataaa     840
tatcagccgt gcgtgactga gtgatggctg cagtttctca gtatccctag gttctagttg     900
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tgcagtggag cctggtgaac tattctgggg gccctgggaa ctattttcat tgtttacaaa    1020
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tgccattctg tgttcagtgc cagtcatgac agctctgctt gttagcatac tacttaaata    1140
taactagaat gattcaaaac tcgggttctg tgatatgagg atatagatag gttttcatct    1200
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atttcctggc ttataactcc caaaacccct gttttaggct tttgttataa tgttgggcac   1260
ttcgggcctc agaaaacagc aggctgtttc tcagatcttc tcctgacctc ctttcacctg   1320
ctgctttttc tccccaaggc aggccataga aactaaaagt ataatcttcc tttgcccgtc   1380
ttccagttgg ccataaaaag aatcctctga cctaccttgt ctgattttag gtcatgagac   1440
ccccatttca gaagggattc tgccccatac ctgagaggaa gaaatgtaga caggccttgt   1500
tggacttccc cactccatct gtattagatt atgcctcttt tgtccaatcc catttctcca   1560
gtgttgtcca tgcttcaatc atccctatcc aatgaggtct ccataaaagg cccaagaaga   1620
caggtttaga gagctttcgg agaacagaac acttggcttt gcaaagtggc acgcctggag   1680
agaacttgga agctccacgc cccttctata cctcacccta tgcatctctt cagctgtatc   1740
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aagctgctcc agcaaattaa aaagaagggg tcagccaggt gcggtggctc acacctgtaa   1860
ccccagcact ttgggaggcc aaggcgggca gatcacaagg tcaggagagc gagaccatcc   1920
tggctaacac agtgaaactc tgtctctatt aaaaaataga agaaattagc cgggtgtggt   1980
ggcgggcacc tgtagtccca gctactcggg aggctgaggc aggagaagaa tggcgtgaac   2040
ccgcgaggca gagcttgcag tgagccgaga tggcaccact gcaccccagc ctgggcgaca   2100
gagtgagact ccatctcaaa aaaaaaaaa aaaaaactcg a                        2141


<210> 755
<211> 2414
<212> DNA
<213> Homo sapiens

<400> 755
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tccgtctctg gagtggcctg tcatcgatcg cgccctccat cgctgagcga cacaagtgga     120
acccccccagg actgcattct gcgaaactac cctgctttc ccccagtttt ggtctgtgaa     180
cacatttggg aaattcttct gatcctaccg ctactctctt gaggtacagt aaattgtctt     240
tgacttccat caccttttgt aatattacaa ttgccatcta ctgagttcct atgatctgcc     300
tggcattgta ctaagtgctt tatattttct tgttcatttt tttatgccaa cataaatgag     360
tttgactcaa ttcttattat aacctgccaa aataagtatt cctcttcctt tttacagaga     420
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<210> 756
<211> 929
<212> DNA
<213> Homo sapiens

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<210> 757
<211> 3940
<212> DNA
<213> Homo sapiens


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<223> n equals a,t,g, or c


<220>
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<222> (17)
<223> n equals a,t,g, or c


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448

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<210> 758
<211> 979
<212> DNA
<213> Homo sapiens

<400> 758
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449

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caccagcatg ctcattactc tcatcattgt tgttggaaca ttttgttctt gggtacaagc      240
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ctagagaaca cttgatactg agctctggaa atcgtttttt aacagcttta ttgatattgt      360
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<210> 759
<211> 2105
<212> DNA
<213> Homo sapiens

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<210> 760
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450

<211> 1491
<212> DNA
<213> Homo sapiens

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<210> 761
<211> 1460
<212> DNA
<213> Homo sapiens

<400> 761
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cccgaaatct ggaatactta ttctattgag ctattacacc agttttaaca ccttcctcgt  1440
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451

gttatgttta aaaaaataaa   1460

<210> 762
<211> 2653
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2630)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2636)
<223> n equals a,t,g, or c

<400> 762
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aactgacaag ttccttatga cccttgacaa atcaccttaa cccatctgag ccttaaattc   180
tcatttattt cctgcataag gagatttggc taaatgcttt ctgaggtcct ttggagtcct   240
gtggctccat ggtaatgtgc tcctttcctt gaagattggg ggttttgtaa tgttgagata   300
ctttgcctct atgcttgtca gctcatgacc agtcctagaa gaggagtcga gacataagcc   360
accttcagag gttcaatgga aactttaaaa ccataccaaa ctctttttta aaattagaat   420
taacaagaaa aaaaaaaagg gtggggttta tgagccttag ttcttggagg attataagag   480
tacttcccca gttttgaggc tggacagtta atatacttta tatcaattat acatttaata   540
taatttaatt taaaataatt taaagattct taggagatag tctgactttc ctgacctaga   600
tgggaatgat cagataggga ttttttttgt ggcacaggct aaatttgatg gtgacattta   660
tattgttgag aatgttacat cttattttac cacaactttt aaaaaatgtt acatcttttg   720
cagtaggatc agttgtgagg cacatagtag ctgaggctcc atggagccac ctttcatttc   780
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gactgggcag ggatgggagg tggccacagg tcagagacaa gtgctcagtc agtccctggt   960
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tgggtggagg tagagaagcc agcaagacct tggtcttaac cccgtgttca ttttcttgct   1080
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aagaactgat taccgagcca ttcaactagc caaggaaaaa aagcagagag gagcggggag   1860
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acaaaattcc cagcatcagt atgaacatat tttatttgcc taaacaagct ttgtgaaagt   2100
taagcgttca aacaccagtg tcagttacct ggaaggctac taaggtaaat aagcaaagca   2160
ggccagttgt caggaaagca gagattgtgc ctggtgctga atggccttgg ggcctgatct   2220
tggcatggca gagacctggg gactgccact gtccccaggt acgtgtacat ggagccaaac   2280

452

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tgtgtgtcct gtggcattgt cagagttatg ttgaaatctt atttgaaaat gttagcaact      2340
tacttgcatt tttaaagacc aaacaagagc tggtaaccta tggcctcaag catctgtcct      2400
tcctaaaaat ggaatagtgg gatgtagtgc ttaatggaaa ctgctaaatc tttttctaaa      2460
aactaacagt ggattttaa aatatattgt tttttgtgta tttcatttgt cctttgtatt       2520
tatctaaaag ggttgatatg attttatatc ttgctctcta ttcctaatag tattatgact      2580
tcttatttaa aataaataac aattgccggt ttctgtttaa tcagttttcn taaagnccag      2640
ggtttcacca tag                                                         2653


<210> 763
<211> 896
<212> DNA
<213> Homo sapiens


<400> 763
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cgccctcctg tgcatcgcgg ctaatatttt gctttacttt cccaatgggg aaacaaagta      180
tgcctccgaa aaccacctca gccgcttcgt gtggttcttt tctggcatcg taggaggtgg       240
cctgctgatg ctcctgccag catttgtctt cattgggctg aacaggatg actgctgtgg       300
ctgctgtggc catgaaaact gtggcaaacg atgtgcgatg ctttcttctg tattggctgc      360
tctcattgga ttgcaggatc tggctactgt gtcattgtgg cagcccttgg cttagcagaa       420
ggaccactat gtcttgattc cctcggccag tggaactaca cctttgccca gcaccagggg      480
ccagtacctt ctggatacct ccacatggtc cgagtgcact gaacccaagc acattgtgga      540
atggaatgta tctctgtttt ctatcctctt ggctcttggt ggaattgaat tcatcttgtg      600
tcttattcaa gtaataaatg gagtgcttgg aggcatatgt ggctttttgct gctctcacca    660
acagcaatat gactgctaaa agaaccaacc caggacagag ccacaatctt cctctatttc      720
attgtaattt atatatttca cttgtattca tttgtaaaac tttgtattag tgtaacatac      780
tccccacagt ctacttttac aaacgcctgt aaagactggc atcttcacag gatgtcagtg      840
tttaaattta gtaaacttct tttttgtttg tttaaaaaaa aaaaaaaaa aaaaa            896


<210> 764
<211> 2070
<212> DNA
<213> Homo sapiens


<400> 764
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ctgccttggt gatcccgggc tgacagccag agagcacagc ggctcagctc ctggagagtg       180
agggttgaag aaagcggagg gcagccgcct gcgccgctg gctcccatta ggtcggttcc        240
tgcagcggtg cccggcagcc ttggtgaagg ccctgcccgg cagagatcat gtattgcctc       300
cagtggctgc tgcccgtcct cctcatcccc aagcccctca accccgccct gtggttcagc       360
cactccatgt tcatgggctt ctacctgctc agcttcctcc tggaacggaa gccttgcaca       420
atttgtgcct tggttttcct ggcagccctg ttccttatct gctatagctg ctggggaaac      480
tgtttcctgt accactgctc cgattccccg cttccagaat cggcgcatga tcccggcgtt       540
gtgggcacct aacggcctgc cctgttagct ttccaaggaa gcagaagacg ggaggggagg      600
cattgacata ggtcataaag cattggagtt tcaaatcccg cagcctcgcg ggtgtcacat       660
tcctgacggc gcctttttgg cctgtgatgt tttatcctta caatgtgaat aatggcactg      720
accggtgctt ttattgtaaa gtcctatagt cgtgggtggt cttgtggttg tgtgtgttct      780
gtccccatct aggtcctggc tggccgcatg accacccctc tcgcctcatt actgtgagga      840
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cattgtcacc tctgtgaccc ctccttgtca gggtctcctt ccttcccaga atgttactga      960
ctcctcagtc cctcttctgg tttcccttta tttctcttct acccttttcc tttttggggg     1020
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cgcccgagag cctcgctttt tcatccttct ttccttgttc agcaggctag acagaaacat     1140
gtcttgactg ttagttgtcc acaaatcttc agtattttct ccacttcatt tttaagaaag     1200
gaagcaacag atagatgttg ctctttcacc tgggtgtctg ggctcaagct ttcccgccca     1260
gcctcacttc ctttgccctt cctcctgcct ttctcaactg tcccaggag ggggcctcat      1320
tgtgtctccc gtgcatgctc tgcagcattg aagtatggtg tgttcacgta gttctagcag     1380
tccccagctg agtgagtggg agagtacctg tgtgtttcgt aacggccttg atccccttga      1440
tagatgtttg gatatttttt ggtgtgccct gtgtgtgtgt gtgtacaaat acatgtgtat     1500
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                                         453

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cactggactc cgaggtggtt cagacaagac agaggggagc agtggccatc atcctcccgc    1680
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tttgtgactg tcacttgctg ctttttctgc gcttcagtaa caagtgttgg caaacgagac    1800
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actttaaaaa aaaaaaaaaa aaaaaaaaa                                       2070


<210> 765
<211> 569
<212> DNA
<213> Homo sapiens


<400> 765
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gcaaaatact gagtaaccac tgggaaaata tttcagatga aagggatgac aaaagcatgt     180
tgcgctttgc atcagcaagg cattgacttc tgaaaaaatg atctgaaaaa agtttcaccg     240
tttgtcttct tacctcattt taagaagcat gtgaaaatgg gatactatag actactgaga     300
atttcagaaa ttgagaacaa tttcataata aaacggctat atttgaagag agaatacatt     360
ttatataaac aggaaaatac atttgacact ttatggaatt ttatgagact ttttgtggga     420
acagaaggtc ttcaaattgt aaaatgtaaa gattgctctt tttattaagt ctttaacagg     480
gatgtatttc attgtatgtt ttgggtatgg ctttggaata aatcatttta tattttaaaa     540
aaaaaaaaaa aaaaactcga ggggggggc                                       569


<210> 766
<211> 1123
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (1067)
<223> n equals a,t,g, or c


<400> 766
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ccctccgggc cgggcggttt ggccccttag cgcccgggcg tcggggcggt aaaaggccgg     120
cagaagggag gcacttgaga atttcggacc caagtttctt caccatgggg atgtggtcca     180
ttggtgcagg agccctgggg gctgctgcct tggcattgct gcttgccaac acagacgtgt     240
ttctgtccaa gccccagaaa gcggccctgg agtacctgga ggatatagac ctgaaaacac     300
tggagaagga accaaggact ttcaaagcaa aggagctatg ggaaaaaaat ggagctgtga     360
ttatggccgt gcggaggcca ggctgtttcc tctgtcgaga ggaagctgcg gatctgtcct     420
ccctgaaaag catgttggac cagctgggcg tccccctcta tgcagtggta aaggagcaca     480
tcaggactga agtgaaggat ttccagcctt atttcaaagg agaaatcttc ctggatgaaa     540
agaaaaagtt ctatggtcca caaagcgga agatgatgtt tatgggattt atccgtctgg     600
gagtgtggta caacttcttc cgagcctgga acggaggctt ctctggaaac ctggaaggag     660
aaggcttcat ccttggggga gtttttcgtgg tgggatcagg aaagcagggc attcttcttg     720
agcaccgaga aaaagaattt ggagacaaag taaacctact ttctgttctg gaagctgcta     780
agatgatcaa accacagact ttggcctcag agaaaaaatg attgtgtgaa actgcccagc     840
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ctaaggagtg agaaacccat ttatactcta ctctcagtat ggattattaa tgtatttaa     960
tattctgttt aggcccacta aggcaaaata gccccaaaac aagactgaca aaaatctgaa    1020
aaactaatga ggattattaa gctaaaacct gggaaatagg aggcttnaaa tgactgcccr    1080
gcccacatca tacagtttga aatgaaactt tgccacaacc agc                      1123


<210> 767
<211> 1255
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454

<212> DNA
<213> Homo sapiens

<400> 767
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gtgcaggagc cctgggggct gctgccttgg cattgctgct tgccaacaca gacgtgtttc   120
tgtccaagcc ccagaaagcg gccctggagt acctggagga tatagacctg aaaacactgg   180
agaaggaacc aaggactttc aaagcaaagg agctatggga aaaaaatgga gctgtgatta   240
tggccgtgcg gaggccaggc tgtttcctct gtcgagagga agctgcggat ctgtcctccc   300
tgaaaagcat gttggaccag ctgggcgtcc ccctctatgc agtggtaaag gagcacatca   360
ggactgaagt gaaggatttc cagccttatt tcaaaggaga aatcttcctg gatgaaaaga   420
aaaagttcta tggtccacaa aggcggaaga tgatgtttat gggatttatc cgtctgggag   480
tgtggtacaa cttcttccga gcctggaacg gaggcttctc tggaaacctg gaaggagaag   540
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ccgagaaaaa gaatttgggg acaaagtaaa cctactttct gttctggaag ctgctaagat   660
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ttgaggtcgg gagttcgaga ccagcctgag caacatggcg aaacccccgtc tctactaaaa  1080
atacaaaaat cacccgggtg tggtggcagg cacctgtagt cccagctacc cgggagggtg  1140
aggcaggaga atcacttgag cctgggaggt ggaggttgcg gtgagctgag atcacaccac  1200
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<210> 768
<211> 1965
<212> DNA
<213> Homo sapiens

<400> 768
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attcccctg caaagctcag gatgatgcag gaacagatta cagataaaaa cagcttagca   180
taccagagga tgagttggga ggccctgaag aagtcaatta atggccttat caacaaagtc   240
aacatttcca acataagtat tattattcaa gagcttcttc aagaaaatat agttagagga   300
agaggactgc tgtccaggtc tgttttgcaa gcacagagtg cttctccaat cttcacccat   360
gtttatgcag cattagtggc aattatcaac tcaaaatttc cacaaattgg agaattaatc   420
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gctatatttg aacgccttcg aaacattctg catgagtctg aaattgacaa aagagttcaa   720
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aacacagacc aggatgctgg gagtagtgaa gaggacgagg aagaagaaga ggaagaggga  1020
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attgtggcgc agaaaccaga tgttgagcaa aataaatcct ccccatcctc ttcctcttca  1740
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gcgtcctcct cttcagagtc tgactcatcc gactctgatt ctgacagcag tgatagcagt    1800
tcagagtctt ccagtgaaga gagcgactct tcatccatca gtagtcatag ctctgcctca    1860
gctaatgatg taagaaagaa gggacatggg aagaccagaa gtaaagaggt agataaattg    1920
atcagaaacc agcaaacaaa tgataggaaa aaaaaagaaa aaaaa                     1965
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<210> 769
<211> 1901
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1425)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1447)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1497)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1504)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1515)
<223> n equals a,t,g, or c

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agaagttacg taaaaaatca ggtcttttgt ggcatattct atcgcaatcg atgagatcac    180
ggatataaat aataccaccc agttggccat attcatccgt ggtgtcgatg agaatttcga    240
tgtgtccgaa gaacttctgg acacggtgcc catgacgggt acaaaatctg gcaacgagat    300
cttttttgcgt gttgagaaga gcctgaaaaa gttctgtatc aactggtcga gattagtaag    360
cgtggcctcc actggcaccc cagcgatggt gatgccaata acgggcttgt cacaaaactg    420
aagtccaggg tggcgacgtt ctgcaagggt gcggaactga agtccatctg ttgtataatt    480
catccggaat cactctgtgc tcagaagttg aagatggacc acgtcatgga cgtggtagtg    540
aagtccgtga actggatatg ctcccgggga ctgaaccaca gcgagttcac aaccttgctc    600
tatgasctgg acagccagta tggtagcctc ctgtactaca cggagattaa gtggctcagt    660
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ttaaaggatt cccagtggga ttctgtactc cacatcgcaa cgtgatggag agaaaactcc   1380
tggcagggcc gctatggtgg gaaaggctgg agtcttctag tcccnaggga ttgggagatg   1440
cccaatnaat ttttttttc ttttttaaga tggagtcttg ctctgtcgcc caggttngag   1500
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456

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tgcngtggcg tgatntcggc ttactgcaac ttccagctcc tgggttcgaa cgattctcct    1560
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<212> DNA
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<400> 770
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<210> 771
<211> 2298
<212> DNA
<213> Homo sapiens

<400> 771

457

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<211> 1296
<212> DNA
<213> Homo sapiens

<400> 772
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458

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<212> DNA
<213> Homo sapiens

<400> 773
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459

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<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1399)
<223> n equals a,t,g, or c

<400> 774
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<211> 1483
<212> DNA
<213> Homo sapiens

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460

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<212> DNA
<213> Homo sapiens

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taacatggtg attgagttga acacaatcaa agtacagtag taactgatgt cccccttcttc    360
ctggatgaat gagcagataa atattgatgt cagcatcctt gaaccatatc aaagtgagca    420
gtgtttggct actgcttcta tttgaaatgg tgctgtgttt tggttgtggt ctgaagcttt    480
gaagcgctac ttagcatctc ctttcttcca tggagctctc acgattcaaa catgacagat    540
ttggtaaaat gctggttagg ttgagtcttc cttgccccca ctcagtcatc tttgtatgaa    600
tcccatgatt tggggtttt tttcttttt tttttatacc agtttttagc tggtgtttat    660
gaagaacagt gagtacctag aactgtgcca ctaattaaag gaaatcctaa gaaggtgcat    720
ttctttacag agctgtgtca tgccatcctt tgggccctct gctggaaaag tagaatcaag    780
tctcaaataa tgcctttta attgtatcct ctagtattat agatatagga cagtactgta    840
tcatacctct gtgaatgtaa aatatcttgt acctgcttta tgatacgtag tagtgaccgt    900
gctttatcag agctgttttt aatgatgtta ttctagaatg ttttctttcc agatgatgat    960
tcagaagcta attttaaaaa acggtgccag gtaccacaac agtaacagaa ctttgcaatt   1020
ttctggggtt ttgttttta ccttttttccc cccttttttt taaatggagt gtgctggatg   1080
tctctataat tttattcaga tgactgcaga acctggaaaa gctgttgctg ctattgatgc   1140
ataacatact gctattggtc ttttatata aatatatata tatatacata tatatatata   1200
atttgaattt ttggaaactt tagctgtgct gtcaactttg gaaaaagtat cccggtttac   1260
tgtgttgagt tggcattgta cagaaattaa cagccatatt ggtctagaaa cgttaaactt   1320
aattttttc catttgtaca ggggtaacgc actgtattaa atatgtaagg tcttatctac   1380
atgggtttga ttacagaaac taataaagta ttctctaaat aatgaaaaaa aaaaaaaaaa   1440
aaa                                                                 1443

<210> 777
<211> 1213
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (66)
<223> n equals a,t,g, or c

<400> 777
caagctcgaa attaaccctc actaaaggga acaaaagctg gaagctccac cgcggtggcg     60
gccgcnctag aactagtgga tcccccgggc tgcaggaatt cggcacgaga aattatattt    120
aacagatctt caagagtaaa aaaaaaagc catcttagtt taaggattag tttatagtga    180
aattgtaatt tttaagaaag ctgggcgttc tataaaaacc ttcaagaact tattaaaaat    240
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tggtattttt taattctcta gaaccacata gtagaatgaa taacttgcta attttattct      300
taaaaacctc atgtttatgt tttttgattt gtgtttgtat atttaaacac tttgtgcgac      360
tttcagctac tctgggcagt tgaaaagtag aaagtcatac atgatacctg aaaatgagtt      420
tcatcacaaa gacccccctc cgaggaatgc agttgccagt gtgcaaaatg ggcctggtgg      480
tgggccttct tcatcatcaa taggaagtgc atctaaatcg gatgaaagca gtactgagga      540
gactgataaa tcaagggaga gatctcagtg tggtgtgaaa gctgttaata aagcttctag      600
taccacacct aaagggaatt caagcaatgg aaatagtggc tctaacagca acaaagctgt      660
taaagaaaat gacaaaaaaa aaagaaaaaa actcgaggtc gacggtatcg ataagcttga      720
tatcgaattc ggcacgagga gaggtcagat tgctgtcaga catggcccat gaacatggac      780
atgagcatgg acatcataaa atggaacttc cagattatag acaatggaag atagaaggga      840
caccattaga aactatccag aagaagctgg ctgcaaaagg gctaagggat ccatggggcc      900
gcaatgaagc ttggagatac atgggtggct ttgcaaagag tgtttccttt tctgatgtat      960
tctttaaagg attcaaatgg ggatttgctg catttgtggt agctgtagga gctgaatatt     1020
acctggagtc cctgaataaa gataagaagc atcactgaag ataatacctg gaagcatcat     1080
agtggtttct taactctcca aaataagatt cttctctgt agcctacttg tctggtttat      1140
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aaaaaaaaaa aaa                                                        1213
```

<210> 778
<211> 2667
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2652)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2659)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2662)
<223> n equals a,t,g, or c

<400> 778
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gcaaagactt ctggtactct gtggtcaacg gggtcatctt taactgcttg gccgtgcttg       60
ccctgtcatc ccacctgaga accatgctca ccgaccctgg ggcagtaccc aaaggaaacg      120
ctacgaaaga atacatggga gagcttgcag ctggaagccc ggggaagtca tctacaagtg      180
ccccaagtgc tgctgtatta aacccgagcg cgcccaccac tgcagtattt gcaaaagatg      240
tattcggaaa atggatcatc actgcccgtg ggtgaacaat tgtgtaggag aaaagaatca      300
aagatttttt gtgctcttca ctatgtatat agctctgtct tcagtccatg ctctgatcct      360
ttgtggattt cagttcatct cctgtgtccg agggcagtgg actgaatgca gtgatttttc      420
acctccgata actgtaatcc tgttgatctt cctgtgcctt gagggtcttc tgttttttcac     480
tttcactggc agttatgttt ggcacccaaa tccactccat atgcaacgac gagacggaga     540
tcgagcgatt gaaaagtgag aagcccacat gggagcggag gctgcgatgg gaagggatga     600
agtccgtctt tggggggccc ccctcamtcc tctggatgaa tccctttgtg ggcttccgat     660
ttaggcgact gcccacgaga cccagaaaag gtggcccgga gttctcagtg tgaggcgtgg     720
ctcatcagac tgaaacttgc tcacagactt ccagttattt atttggggtc tgaaggatat     780
caacagctca tctgtgacca acagggcaac tggaacctac acaaccaat tgcttgcagc      840
aagcagagtt ttatatattt atagtcacag atggcagagg aagaggctct cagtccccac     900
ctgtacaaca acggaaaggt gtgtggccac acgaagaagc caaacgccgt ggcctcctgc     960
agagctgggg cttctgtgga raatacttcg ggttattaca tgggttattc aaatcctggg    1020
tcctgagctg ctgtttccaa tcatgaagaa aaacagtgaa tccagtgaac agggattctc    1080
caagcagtca tttcagggg ctcctgctga ccccgccact cagcagtgca ctccccggat     1140
cacagcaggg cgtttacata gaaagacgtt ttggtctcga ttagctccga tgctttgcac    1200
tgaagttgca aaagatctgt gcactgaaca gtgaaggtgg cttccggcac actccccgct    1260
gccccggaag agacatcctt tgaccctctc agcaagtctg tgtgtgtgcg tgtctgtgcg    1320
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462

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tgtgcgcgcg tgtgtgcatg tgtgtcaaaa ttgccagtgt tgtttaggca atgtaacatt   1380
taccggctgt gtacagcaaa caagctattt tttagaaacc gacgtttcag ggaagagggg   1440
agagagccgc ggggtcctgc ccgtggttac tatgaatgta ttgctgttgg aggacatctc   1500
gatccaaaga acagccgttc ctgtgcggcc cttcgttgcc ctcctgcttt cattttttaa   1560
agaaatcttg agtgcttgag ggccttggaa ctgattttt ttttttgttc cagccaaatt    1620
agcagtgtat aaatggcacc taggtaagag cagagctgcg gctcggtgac ttgatacttg   1680
gggcagcccg atgctgtgtg tggggcaggg gaggcatcct tactggagag gcagggccca   1740
gccattgggc acctctggga aggggagggg accatgaggc agccagcccc tggcaggggc   1800
gactgtgcca ccgcaggcag cgctccagtc gggaatggcc aggatggcgc cctcttgttg   1860
gagttttttgg ttagctttta cgttttcttc tccacccacg gcacaggtga taaaatagga   1920
tccttggtgc ggagcttaaa attatgccag aaagccaaca gctcccctcg tggggccttg   1980
ccttaaactt gcctggtttg tacatttttt gccggacgca tcaagaagca atctgtgaca   2040
aagtctgagg gtcttccttt atgcttgccc tccacactaa gagaagttgg cgtctccctc   2100
ctgggaattg ttttgccttt ctgttcatct gtgaactgtt ttttgttttt aattactctg   2160
taccccatcc gaatcagggc ttctaccact gctgatgcaa aacccacaaa gggacctacc   2220
tgagccaccg tcctagccaa gcgagcaaac ctgcaggggg tttggaagtg gacttggtca   2280
ccgcagaagc gtgtgcgccg ttgggggaag agctgcgtca cagccagagg gacaaagtgt   2340
gggtgatcct ggagacgcca gtttccgaga ttgttctgca tattcatttg cacattgttg   2400
tctgggttgg acatgcgtgt gggcttcagt gtgaggcttt taatatgtat atcctgttat   2460
caataaaaca attatccaag tggttgaatc ctgtgagact tggcaagtgt gtgcaaatca   2520
agtatacttg acttttcaac ctcttctttc aatgtaactt ttatatgaaa taaagtaatc   2580
aattaacagt tctcaaaaaa aaaaaaaaaa aaaaaaaaaa accccggggg ggggcccg     2640
ggaacccaat tnccccccna anggggg                                       2667


<210> 779
<211> 1356
<212> DNA
<213> Homo sapiens

<400> 779
ggcacgagat cccactcaat cttacctgta ctatttgcca tctcctctca atcaagttca     60
ttccataatg atgttttcct gagtaaacca gaaaaaaaag aatccttata aataggcaaa    120
gattacttag taaaataggc aaaggctctc agagcctttt ttctcatgtg acatgcatgt    180
atctgaatag gaacttcttg tttctggctg ttgaattatc caaaaggatg gctttagtgg    240
taagtttttgt gcataaagga aaggaaggca tgttagccag tggagaatac atttaggcca    300
cagggacctt gtggtgcttc ttggaattac gctgggcttt atgcatggat agcagatgag    360
gccaggggag gaaaaactct agagatggaa ggatggatgg acaaaggaag aagagaagaa    420
agagagaata aatagcatat gcaatatgtt gaatttgcac tgctagcaag caagaactta    480
agtcacacac atacccagag ccaggccctc aggaatattt ctcaaccttt atgctttact    540
cttctccaga tagtaaaaca cctacaaaat atcatcaggc cttgttcttc agcatgacaa    600
aatgtcctgc ttcttgcctc tgtgaacaag ggggactgag attgtatctc ctttccacaa    660
gagcccttgg gatcaacacc tatggaaggg aagggaggaa tggaaaaaag gggagctgag    720
ctgggatgca gatctgctag atgcctcaga caaccctgcg gggagttatg gagatggaat    780
gccctttaga attgtccagg gttcaggaga caggggaggc cttttttatac ctgcatcacc    840
tagtcactgg gtatgcttga tggggaagaa tcatgacgtt aggagaggga ggtggctctc    900
tgaagctgta gcaatccccca aaggggggcag acctttgcag atgaggtctt tcttctggca    960
gcactcccag aaactaaggt aaagtctctg ttattcctga gggggatccg gatggcttat   1020
catgtccatc acactccaca atgctatata ataccataaa actttgcaaa tagaatgaag   1080
gagaaaataa atattgcaaa agcatactgt caaatttcta cataacagaa tattaggttt   1140
gaaaatatta cccattagtt aaatttctcc tccttttaca atgatgtttg cctttaaagg   1200
ggtcaccaga gaataatttg tttcacagag cagccatgct attaatacta ctgtttagag   1260
atatagaaac gactttgcaa ctgtgaattg ctaagaattg tagaaataaa gggaaaataa   1320
aattttcttt tctaaaaaaa aaaaaaaaaa aaaaaa                             1356


<210> 780
<211> 850
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
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<222> (18)
<223> n equals a,t,g, or c

<400> 780
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gctgacctca tgatctgngc gcctcggcct cccaaagtgc taggwttaca ggcgtgagca      60
ctgcgtgctt atttaaagta tgtsctgtct ctctccttat gaatgttttt tttttttccct    120
gttggtcact cattttcatg atcgttttcc aattcttaga tctgacttca tgcatgagaa     180
gtacagaaag tacacaagaa taaagaataa aagtagggga gtcaggaatg ttctatttta     240
aacgcaacta ttagattcct cactgtctcc cttcaattat tcctgatctt tactctttga     300
gtcctccctg aaataacatg ctattagatt gatgcaaaag taattgtcgt ttttgccatt     360
acttttttt ttttctttc ttttttaga. cggagtttca ctcttattgc ccaggctgga       420
gtgcaatggt acaatctcgg ctcactacaa cctctgcctc ctgggttcaa gcgattctcc      480
tgcctcagcc tcccgagtag ctgggattat aggcatgcgc caccacaccc agctaatttt      540
gtattttag tagagatggg gtttctccat gttggtcagg ctgctctcga actcctgatc       600
tcaggtggtc ctcccgcctt ggcctcccaa agtgctggga ttacaggcat gagccaccac      660
atccttgcca ttactttcaa tagcaaaaac cacaattact ttttcaccaa tctatataat     720
gattagaaat atatccccta ctctggaggg tgaggcaagt gatcctatcg cgtgaaccca     780
acagtttgag gccagcctgg gcaacatggg gagatttgc ctcaagaaaa aaaaaaaaaa       840
aaaactcgag                                                            850
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<210> 781
<211> 1018
<212> DNA
<213> Homo sapiens

<400> 781
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gaatatttta ggtgaaacta aatcatctag gagcgatgtg ataagtttca catgtctaaa      60
atgtaacttt tcaaacactt tgtactacag catgaagaag catgtgctgg tagcccattt     120
tcactactta attaactcct actttggcct aagaactgag gaaatgggtg agcaaccgaa      180
aactaacgat actgtttcta tagagaagat cccaccacct gacaaatatt actgtaaaaa     240
gtgcaacgcc caatgccagc agccaggatg cgttaatgta tcacattttg acatcagaca     300
tacacagaga tttggagaat aagcttagat ctgtgatttc agaacatatt aagaggrctk     360
gactcttgaa gcmaacgcac attgctccma aaccagcagc acatttggst gcaccagcaa      420
atkgcatgct ccaagcgcty caggsagctc cttgcttcca tcttgctttg ccacagaaca     480
gtccaagccc agccgcagga cagccagtga ctgtggccca gggtgcccct ggaagcctca      540
ctcattcccc ccctgctgct ggccaatccc acatgactct ggtctccagc cctctgcctg     600
tgggccagaa cagcctcacc ctgcagcccc cagcacctca gcccgtcttt ctttctcacg     660
gggttccact tcatcagtca tggagaccag ccagtttaga tggtaagtca tatttctggt      720
ggtacacagc agaggaaccc cttcactcta tctttaggta gaaatatttg gaggatgtga     780
cagcctctga gaaacataat gttactatgt ggatttaaa aaatataata cttgcatgta      840
attgctataa tgttcatatt tgaggcagtt gtgaaactgg tttatgattg ttggtgtact     900
ctgttgtaaa ttcaaagaga gcttgttgaa catttttttt ttttacctat tgttttcaga     960
gtgtctattt tgaattaaaa tttgttacac cgctaaaaaa aaaaaaaaaa aactcgag      1018
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<210> 782
<211> 1693
<212> DNA
<213> Homo sapiens

<400> 782
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ggcacgagca aagttgggca tataggcaca catattacgt tgagccctgg cctttggatc      60
tacaatgcca tagatgaatg caacatactc ctgacatatc aagaggttct atcatttttt     120
cataattttc caaattggaa aaattctcct taattatttt atttgtatta taaactttt     180
tccactagtt ccccacttac tgttgactac agatgcttta gtagttttaa acaatgaatg     240
ggaggagact gattttccca tatgtttttgt aaattggcct ttcttcttcc cacttcactg     300
aagataatct gcccttgcag attatctttt atgattcagg gagctatgga ctggatagtg     360
atggactttg taatgaaagc acaagctact attttgcag ctgctgaaga taagaataag       420
ctagaaaaca tgaaagtaca atgatcggag atgctgctgc atattcctgt gtagtaaaag     480
atctgctttg ttatctggac agtctcttcc agaagaagag acttcctgag tcaaaataag      540
ataagaagta tgcaacacaa agaagtgaaa tgacattctt acagttgaaa tattcatact     600
atgttagttg gtaaaactgc ttagcttcta cctcattgag gcaacattgg tgtgagaaac     660
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actgaaatat gactgagagc ctacactagc aagaagatgg ggggaagata cctttaaaaa     720
gatcacttgg agttcaataa ttatggatgc ataataacat tttgagtact cttaatatag     780
tcagcctagt tctttctcaa aaaataaatt caaggacata acagttcagt tgatactatg     840
gaattttgtt tgtttgtttg tttgttattc aaaaccagca aagggatatg atgcttattt     900
ggtagagagg acatgctctt cagctctttc tgccttcttg atccaagaaa gcattcacaa     960
atttaccagt ttatttactc aggaaaatgt ggctataaat gaatttaccc aggaataaac    1020
taaattctat tatttactaa gttcaaatag tatacttttc ataaagggat gaaatcagtt    1080
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attaaaacct actatcatga ctgtaaagga ttttaaccat tctcactttt tatatttcta    1200
gctattaata ctgaagggag gacagaatat taacactttg aaattaactc tccgccaggc    1260
acggtggctc acgcctgtaa tcccagcact ttgggaggtc gaggcgggca gatcacctga    1320
ggtcaggagt tcaagaccag catggccaac atggtgaaac cctgtctcta ctaaaaatac    1380
aaaaattagc tgggtgtggt ggcaggcacc tgtaatccca gctactctgg aggctgagac    1440
aggagaatcg cttgaacccg ggaagtggag gttgcagtga gccgagatca cacctttgca    1500
ctccagcctg ggggacaaga gcaaaacttc ttctcaaaaa ataaacaaat aaataaataa    1560
ataaactctt gacctgaaag atatatgctc cgttttgact aatataaaat tgattagcag    1620
agttagttga aatcattaca gcacccaggg gcagctggat tgctttcatg accaaaaaaa    1680
aaaaaaaaaa aaa                                                        1693


<210> 783
<211> 1136
<212> DNA
<213> Homo sapiens

<400> 783
ggtcgaccca cgcgtccgag atgcttgctg ctgattggtt ggggtgggtg aaatcacagg      60
gagttgaagc tgtcctcctg tgggctgaat tgcttctagg tggggccata ggagtgggggt    120
tgctgggtcc aggtagaacc acgggtgtca gacatgcaaa aataaaataa aataaaataa     180
gataaggtaa gataaaataa aataaaataa aataataaat aaaataaata taaaatttcc     240
ctgaaaagat atttcaaaaa gccagtctta gattctacaa taatgatgtt atttgctgga     300
gtaattgatg gagttgcatg tcttataacc tctggaataa cggctgacaa tctctcaagt     360
ctgcgcctta gctggactca ggttcctctt ctccccacag cctgactgcc tccattagct     420
tcacaaaagt ggttgggktt cagggsaagg cccattgtca tttaaactgt agccgaaatg     480
acttccaaag ttagcttggc ccaatagccc aggaatattt aagtggaagg caagatgggg     540
gatgggttag mttagctctc tttcactctc atagttttct cactggtata atttttgcaa     600
aggcggtttc atgcctgcca tctctttcgt cgctacctct cccagttccc attcttagct     660
gttttatgaa atgcttctag tttcatcctc ttataccaag ttctgggaga ctgatttgrg     720
taataataaa actccagttt cccatacagc cggctctgcg tgaattaaac tcattttcta     780
ttgcaatttc cctgtcttga taatcagttc tgtgtaggcc gtgaggaagg agaacccgtt     840
gggtgattac gagactgtgt tactgcccac tacctaatgg atacatttag cctggtatcc     900
aaacccatct aattatgacc ataactatat ttatcacctt gctctgcttt caaacgatat     960
gacacacaat gaatgaaaac tttcattttt catcttcatt tgtgctgttc cctttgcctc    1020
aaatagccct caacttgcct acagtaactg taaaatttgc cacctaaaaa aaaatctcaa    1080
aatcctctct atgctttgat gtccagcaaa aaaaaaaaaa aaaaaaagg gcggcc         1136


<210> 784
<211> 2405
<212> DNA
<213> Homo sapiens

<400> 784
acccacgcgt ccgcccacct cagcctccca aagtgctagg attacaggtg tgagccactg      60
cacttggcca acaatttttta attgtatagg aaactagcat ttttgaagta cttctgaatt    120
tagcacctag gtcaaattac gttggatatg ttttcatgga aactgttgta ttctcttatt     180
ttgcatggtt tggctcttaa ttgcttataa ttctggtaca tattgagtac aaggaaaata     240
tattttaaat atgcataagt tagacttgct acaaacattg agattagaag ttgcaaactg     300
accactaggt catatctgct ccacaggcgt atctcacata gtttgagaac tattttgaac     360
tagttgctaa agcttaaaaa tagaggaatt tctcttgaaa agtggaattt tggataataa     420
tggattttat atatatatat atatgtcagt catggactgt cactacatag tagctattat     480
ttttagacag agtaagtgct ctccaatttg ccagagctcc tgtcattctt taatatatta     540
cagctggcct acttcactca tgtaccttat gtagattcct ctttcgttat ttataggtat     600
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465

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atatatacat aaaggcagct atataaagaa atttcttagt tttttcatta ataaattcaa    660
gacatccgaa gcttctttgc tttattattt ttctggtaca ttcgtctcct taaaaggaga    720
cattagaagc agtaaacatc ccagagatag taactttctt cttcagaact ttttccaaca    780
aatcactcca ttggctgatg aaaaagaaga tgactgaaaa ggtttatact tcctggagtt    840
ccactatctt gcgctgtaat ttctttaggt ctttctgtac tttatatttc tctaaatcca    900
tctttgtttt ctgtatttgt tggagggagc tgagagagtc atgaattgat ttaaatcctg    960
taagagggta aaagaatagg tcacttaaac aatgcattag agcttttttt taaaaaagtt   1020
gctaatcggc agtcctgcca taattgatta tcatttaatt ccaagcgcat taaattctat   1080
gaagaccagc ttaaaattgt acataatata tttcttgtat gtcatgaaga tccattcaca   1140
atagtgtttc aacttatatc tggttatctg gtttcattgt gaaatttatt tttctcctcc   1200
tcaaatatat tgcataattc tatattgcaa gagagaaatt taaaatattt tattctttct   1260
gaatgctttg atgagagact tgtgtgattt tttttcagtc ttgttaccaa attgaaggta   1320
aagatcacag atgagatttt aaatcttctc tgaaagtagc ctatttgagg gacctaacag   1380
cggccccctg ctgccctcct ccctcctagc actttgtatc tctcttatgc atgtctagtc   1440
actcctgacc acagacctat caaacctcaa ggccttaggg cacaacccat ttgttattca   1500
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<210> 785
<211> 2937
<212> DNA
<213> Homo sapiens

<400> 785
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gctctcccat agccatgtgt tgaatgctaa ctaggctggg gtggacgaac tctgccaact    180
gctgtcatct tagaagatag atgcagcagt aaggaatgtt tgttttgctt ttttctgaaa    240
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tcccctgagc ctgtctgctt gggggtggta aaaataaaaa tcccagttta ttttcagtac    360
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466

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gaagccagat ggcaattcag acaaaggtat actcttcctg cttcatgggt ggtggcacgg   2040
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atgtacgtgg gctgtgtggc agtccccaca ccctgccctg gcttcttcag gttatcgcac   2640
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ttgactctgt gcaggatgtc actcaatcag tttgggtttg ctttatttta ttttatatat   2760
atattttttg gtatcctgta cattgcagtg ggtgtgaaga tagtatttta atatttgtac   2820
aaagtttaat ttaattttaa ttgttctatg tatataactg catttctaaa taattaaaaa   2880
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<210> 786
<211> 1709
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (365)
<223> n equals a,t,g, or c

<400> 786
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tggttatctt aattaattgc ttatatttat atttaactga aactagcctc aagatgccac    180
tttattaaag tttgagagtg gtaagaaatt acaaaactat tccattaaaa aaaatagama    240
agaaaaccaa ataaaccaga agaacatata aactatgatt agtcaaatca aatctctgca    300
tttaaaagta amcatcattt actagatgtc tactggacta gaaatatgtg tcttctgamc    360
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tattccatta attttatcac mcagtatgaa gtttttttaa aaccaaagcc aatgatgtac    480
atatattcaa aagcmcaaga ttctctgaaa atatagaaaa tactgctagg cttattttac    540
gaagacaaag gmcaatagga agctgggaag aataccagca aacagctata cgttataagg    600
cctctgtatc acaaaaatga agggaaaata aagccaatct aaagtattac gtacttaaat    660
taataaactg gattggaagc aatcattcca ttataaattt cctttcatac atagcaatcc    720
cactgagatg ataccttgt aaaatcaggc aaaaatcaat tgttaatatt ctagagatgg    780
acaaaccaca gattaagtac ctaaataatc atgtttccaa tcaccaatta actaagtaga    840
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tgatgtagga caagaaccta ccagttcaat caacatgcaa ttaaaactcc tgatgaagga   1140
cggcccaggg cagtccattg gtttggggca ggggacgcag agaagcaaag cctgttttaa   1200
ttaagaawat actaggcact cctctttaaa tcctcaaaaa aatgaggatg aacaagattc   1260
caaaaccaac aatcacaatg tgtgtgaaag taccagcaac aagaatgaag tgggactgaa   1320
tatgtgcttt cctacaaatg aaacctgttt gatggtgtaa ggaaaatgga tgagctgtgg   1380
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tcaagaatag gccgaggcag acatctagtc cagcatgact cagcgagttt ggagtgcagg   1440
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tgtgctcatg cttgactcgg agccactatt gtctgtaaaa ggtataatta ccctgctaat   1560
gctgtatgta acggcttgca cctgtggctc atcctcaggc ttgtacccat ggcttgcttg   1620
tgcccatggc ttgcttgcac ccacagctcc cgtgtgtcca gagaataaag ccatgttgaa   1680
atgccaaaaa aaaaaaaaaa agggcggcc                                     1709
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<210> 787
<211> 1885
<212> DNA
<213> Homo sapiens

<400> 787
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actgccacat attgaactca tattgaactc atattgaaaa tatgtcattt tatccactgg    180
gttttgtttc ctactttttt tatttgtgtt aagaaaggga aaaaaatcac aagtttgtct    240
aaccattcag tagaaaaatc gacaaagcat ttgcagacaa cttggcaagg ttacagagaa    300
acggatatac tgtttttcag tatttgggga ggttggtttg agcagcattt attgagaatt    360
tcattagtgg ggatgtttct attgaaaaca cagagttaga aagtcataaa atgttcttgc    420
aatataaggt aataatacca ccagcgttta tcttactgtt ttcatgttct aagtgcatgc    480
acctgagtaa aagcatctgg gctgcagtcc agtctgagag atgccaggaa aggctgccta    540
ggccagttca gtccagtaaa tccctcttcg atcttctctt ccacacagac agcggtgatg    600
agcatgccca tgaactgaca tgattatttt ggggaaaatg aaagacttgt attctttttg    660
agatagtaat tccactttca ggggcgaata cattttgttt attttatcac ccttcagtga    720
gttgtttttg ttctttaatc aaggatgtat gtttgaagta agaagtaaag cataaagtat    780
atgattttgt gtgtgtgtgt ttttatcttg ctatacctgt agggaatgtt taattctgcc    840
ttggaagtgg ccaaatttga aggtgctgtg attcgaacag tcagtgggat aaggggggcag    900
atcaagaaag cactccgagc tccagaagga gctttcaggg ccagctttga ggataagctg    960
ctgatgagcg atattgtctt catgcgaact tggtatcctg tttccatccc agcgttctat   1020
aacccagtaa catctttgtt gaaaccagtg ggtgagaaag acacctggtc aggaatgcgg   1080
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acagagaagc ctgggctgct gggactgggt tcattctcat gacttggggc tgtcgagatt   1740
taaagtgatg taagctgtgg ttatgtggat tctcttactt tcctctgcct gcctcagttt   1800
aattattttg tcctacagaa atatcattaa aatatttttt tgttaaaaaa aaaaaaaaaa   1860
aaaaaaaaaa aaaaaaaaaa aaaaa                                          1885
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<210> 788
<211> 1078
<212> DNA
<213> Homo sapiens

<400> 788
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tagctatatt gcccaggctt ctcctggtct cttaatgtct gccccatctt agaatcttgt     60
gtttctcacc atctatgtct ctgagatttt gttttttgtct tcctgtatgt ccatctctcc    120
ccatctctgt ctttcatgtc tttctctctg tctctgacca cccagtatct ctgtgtctca    180
ctgtctctgg tcatgaaatg tctgtcattg tggcccgttt cacactgtct ctatatctgt    240
ttcccctgag atccgggatc agttgaagga agaggagatc cacatctacc agttccccga    300
atgtgactct gatgaagatg aagacttcaa gaggcaggat gcagagatga aggaaagcat    360
ccctttgca gtcgtgggat catgcgaggt ggtgagggat ggcgggaacc ggccgtggag    420
aacccacatc actgcgattt cctgaacctg cgacggatgc tggtgcagac acacctgcag    480
gacctgaaag aggtgacgca cgatctgctc tacgagggct accgggcccg ctgcctacag    540
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468

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agcctggccc ggcctggggc tcgcgatcga gccagccgca gtaagctttc ccgccagagc        600
gccacagaga tcccgctgcc catgctgcct ctggcggaca ccgagaagct gatccgcgag        660
aaagacgaag agtgcgccgc atgcaagaga tgctggagaa gatgcaggcc caaatgcagc        720
agagccaggc ccagggcgag cagtcagacg ccctctgagg ccacgccccg cccggcctta        780
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agtccgtagc cccgccccgg cgctggtccc gcccacccag acaccgccca cttcccggcc        960
cggggcctgc acaatctccg accgcatcac tgtcttccgg agtccccctt cttctcccag       1020
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<210> 789
<211> 1553
<212> DNA
<213> Homo sapiens

<400> 789
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tacatgcatc gtaagttttg catatttaca ttgcttctgg tttttagccg ttctgaatct        120
gaacaccttc cttttttagc agcagcaggc gctctttagt catttctccc ccagttcgaa        180
cagctacagt ctccagtcct cttacctcac ctactagtcc ctctacactt tccttgaaga        240
gtgagagtga atctgtctca gcaactgaag atctggcacc tgatgcagcc caaggggaag        300
acaattctga gatcaaggag ctcttagaag aggaggaaat agagaaggaa ggatctgaag        360
caagctcctc tgaggaagat gagcctctac cagcctgcaa tggccccgcc caggcccagc        420
cctctcctac cactgaaagg gccaagtccc aggaggaagt tctccccagc tccacaactc        480
catcaccagg cggagcctgg agcccttcag ggcagccttc atcatctgcc acagaagtag        540
tcctccgaac ccgcaccgca agtgaaggat ctgaacaacc aaagaagaga gctctatcca        600
gaggactcag caccccctag taggctcctc cacccagagc cactgcaagc cccaggccct        660
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gggcctcctt ggggactggg actgcaagtc ctaggacctc cctagaggtc tctcctaatc        780
cagaaccacc agagaagcca gtaagaactc ctgaggccaa agaaaatgaa aacatccaca        840
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agcctggaga ggcaaagaag atggaagaca aggaaaagga taataagctt atctcagcta        960
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cagcacctga acctcaagaa gaggtatcca caagtgaaaa tccacaactc tgaagagaaa       1080
ctaccaagac tcctcctgcc ccaaacctcg ccagagaagc tcttcaacca gagggtatag       1140
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caggctgggg agaagagaac attagactca gggaatattt aattctggtt ttagcattat       1320
tagaataaga ctttatacat taactaaagt ggagctttaa tcactataaa aagcaaaagt       1380
atctatagac acagacactt gcctatacag agacataacc acacacactc agaggatagt       1440
gaacaaatct gtctttgact tacgacccat tttgcaagac ttaaagccgg aagaacacat       1500
tttcagattg ttaaataaag tctgattctg actaaaaaaa aaaaaaaaa aaa              1553

<210> 790
<211> 1258
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1180)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1240)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1243)
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<223> n equals a,t,g, or c

<400> 790
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ctttgcagtc ctgattgggc ttcttctgac tttttgtttc ctaatcttaa aaagctgtaa   180
agggcaccca tttctcttca gttcacaatg cagagactac actgacaagg tgaaatttcc   240
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ttgaactgat ggaacttatg ttgagaaata aagtttatat ttaaaaattt cttttaattc   360
cattttccat gaacttttaa aagtcccctc atacatgttt acagatgtcc atagaaacgt   420
tattcagata ctgaataaac aaccaaaaaa acattgtttt atcaatgagg aacctgttaa   480
atctacataa tacagctata aaaataatta tgtagttcta taattaccga catgaagaca   540
tctgagtaaa aacctatttc tgatgttata gaagaacaag tatagtacac tcttgaatgt   600
aaatttctct gtgtatgcat tcatatatac tgtacattca gaatcctgga aaggggcttg   660
cacagatgtt accagtgtat gtctcagagt gacagaagga catatgagtt ttcctttttcc   720
cttatacttc tttaaaaaca cactgatttt ttttgcacaa tgaatatcaa tcatattaac   780
atataaagat ttaattttt ccccagaaga aaacaaaag attgagcttt gtgtaccatc   840
cacggacaaa aatgctatgt gttttgcaga ctcaggtagt agtccctgcg tgtgctgggg   900
gtgagatggg gaggagccgc tcatttctca gcaggccaca ccactttctt ccctaccaaa   960
gctgcacaat gttttcagca gtgtctgcaa tgagagctaa atgacctcca tctacaacaa   1020
atgtaacctg ggcacttgct cttccacgga tgctcatgag taaaaggaag ctggagttct   1080
ttacaaaaga agctttgcta tgagaaataa aaacaacaaa ctgtttttta caattttat   1140
ttggtgttaa ctccacaaga aaaaaaaaa aaaaaaaan aaaaaaaaa aaaaaaaaa   1200
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaan aanaaaaaaa aaaaaaaa   1258

<210> 791
<211> 346
<212> DNA
<213> Homo sapiens

<400> 791
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ctgatcatgt ccgaagaagt acaccacttt cttaatcatg cagctttttaa aaatctcctc   120
agccccacac ttgagggtct ctctcctaga ttctaatgtc tagccctaca cgaatgcagt   180
atgctgccct tgatgtgata ggacaacaga ggacctgcac acatgctact ggtcctgact   240
gtgttttcct tccataaaca ctgttctggc aagctggttt tatgtgctgc tggaccattt   300
gcttatgttt gsacaataaa ccagraatta aatttaaaaa aaaaaa   346

<210> 792
<211> 541
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (141)
<223> n equals a,t,g, or c

<400> 792
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caggagtgta acatcaagca ccgaggacat gtgcgggaga gcgagatgtg cactgaggga   120
ctgttgkccc ctgtggctgt ngagrgtgac tacggggggcc cacttgcctg ctttacccac   180
aactgctggg tcctgaaagg aattagaatc cccaactgag tatgtgcaag gtcgcgctgg   240
ccagccgtct tcacgcktgt ctctgtgttt gtggactgga ttcacaaggt catgagactg   300
ggttaggccc agccttgacg ccatatgctt tggggaggac aaaacttgta agtacagtca   360
aggacaagac ttgtactcaa rgttgagatt taataaaatt aatattttta ctacttcacc   420
aaggactttc ttaaatgaaa atggttttc cccctacaag taaacagtaa taaagaagag   480
aattattcct agtgcagttt gtttttcatgg tcttaatttt tgctaagact ccactgtttt   540
t   541

<210> 793

<211> 464
<212> DNA
<213> Homo sapiens

<400> 793
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ttgaagaatg cacagtgaca aggggagtag ctattgggaa cagggaactg tcctacactg     120
ctattgttgc tacatgtatc gagccttgat tgctcctagt tatatacagg gtctatcttg     180
cttcctacct acatctgctt gagcagtgcc tcaagtacat ccttattagg aacatttcaa     240
acccctttta gttaagtctt tcactaaggt tctcttgcat atatttcaag tgaatgttgg     300
rtctcagact aaccatagta ataatacaca tttctgtgag tgctgacttg tctttgcaat     360
atttcttttc ygrwttawtt aatttyctkg wattatakgt aaaaccaaaa tgttaaatca     420
akgraataaa tttgcagtta rgtcttaaaa aaaaaaaaaa aaaa                       464
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<210> 794
<211> 453
<212> DNA
<213> Homo sapiens

<400> 794
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ggcttctact ttctatatac tttctcccac ttgagaaagg ggccttgagg ctgggtccct      60
tcatggtata cctttagact gaacggtttg caacctaggg cttgggcatt acattccctg     120
ggattcacat gccctaacta aacctacctt gattttctca gacagcacag gcaggcaata     180
aagcgtcaca gattgtcccc taaccccatc cagccatgtg tatgggtgtg ttttattcaa     240
tgggatagta ctgagcacat gaaagaaatg aatgacttct gtcaatctct tttcattcag     300
tcttctcatt ctgtcaattg ttttctcatc cgcagtgcct ctgccagaac tgtgctcaca     360
tccattattt aagccagatc ttttctaagt attatagaag tgtagaggca catagaataa     420
ataaaaccag acttcaaaaa aaaaaaaaa aaa                                    453
```

<210> 795
<211> 2212
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (975)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1255)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1337)
<223> n equals a,t,g, or c

<400> 795
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tcatcccggt cgtcctgtta cttactgttc ttctacgtcc acttgattct agtcttccgc     120
tctgggcccc acgaccaaat catgtccagt gccttccagg ccagcttaga gggaggacta     180
gctcggatca cycagggtca gccactggag gtggcctttg ggtcccagrt cactctgagg     240
aacgtctttg ggaaacctgt gccctgctgg cttcattccc accaggacac ctaccccatg     300
atatatgaga acggcgaggc agctcccacc agcaacaggt gacctgttac cccttcaaag     360
acgtcaataa ctggtggatt gtaaaggatc ccaggaggca ccagctggtg gtgagcagcc     420
ctccgagacc tgtgaggcac ggggacatgg tgcagctggt ccacggcatg accacccgct     480
ccctgaacac gcatgatgtt gcagcccccc tgagccccca ttcacaggag gtctcctgct     540
acattgacta taacatctcc atgcccgccc agaacctctg gagactggaa attgtgaaca     600
gaggatctga cacagacgtc tggaagacca tcctctcaga ggtccgcttt gtgcacgtga     660
```

471

```
acacttccgc tgtcttaaag ctgagcgggg ctcacctccc tgactggggg tatcggcaac    720
tggagatcgt cggggagaag ctgtcccggg gctaccacgg gagcacggtg tggaacgtgg    780
aggagcaccg atacggcgcg agcaggagca gagggagcgg gaacgggagc tgcactcacc    840
tgcgcaggtg gacgtcagca ggaacctcag cttcatggcg agattctcgg agctgcagtg    900
gaggatgctg gcgctgagaa gtgatgactc ggaacacaag tacagctcca gcccactgga    960
gtgggtcacc ctggnacacc aatattgcct actggctgca ccccaggacc agcgctcaga   1020
tccacctact tggaaacata gtgatctggg tttcgggcag cctcgctctg gccatctacg   1080
ccctgctgtc cttgtggtac ctgctccgac ggcgaagaaa tgtccatgac ctccctcagg   1140
atgcctggct gcgctgggtg ctggctgggg cgctgtgtgc cggtggctgg gcagtgaact   1200
acctcccgtt cttcctgatg gagaagacac tcttcctcta ccactacctg cccgnactca   1260
ccttccaaat ccttctgctc cctgtggtcc tgcagcacat cagcgaccac ctgtgcaggt   1320
cccagctcca gaggagnatc ttcagcgccc tggtggtggc ctggtactcc tccgcgtgcc   1380
acgtgtccaa cacgctgcgc ccactcacct acggggacaa gtcactctcg ccacatgaac   1440
tcaaggccct tcgctggaaa gacagctggg acatcttgat ccgaaaacac tagaacaaga   1500
gtgtggcaaa gaacacccgt gctggggtcg ggacgaggtt gaagggtctt ggtcaatgta   1560
cgtaatgagc agggtggggcc ccacgctggg aggacacggg ctgggctgag cagggcctct   1620
agtggaacac atgggggtct cattgaaaag ctctctgatg agcacctcct tttgtgcaaa   1680
gttaatttt tctcgacaat aaagatattc cgtgtcttca cccctgaact aagacacagg   1740
gagtatttca gaggccagcg taggagtcat cgacaacgaa aagccgagaa cccagggcca   1800
gcagtggagc ctcagcagac cagggcctgg tccttgctaa ttgctgcagg gtggagtttg   1860
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ccctcagcga gcccggcagg cgtcccggga cagctcagtg ttggagggcc acctgaacca   1980
cgagccaggg ctggggcttg catgtcattg tctatgacag cgtcaagact ggcccttggc   2040
accgtgctgt gtggaaaccc tcccctctga gactccactg agacgtggct gagtgaaatc   2100
ttcctcgtca gtggtcaagg tgtgtcatcc atacagctcc atgcctttgt cttttttaaa   2160
tgtaattaaa aaaggaacca actggaaaaa aaaaaaaaa aaaaactcg ag               2212
```

<210> 796
<211> 1518
<212> DNA
<213> Homo sapiens

<400> 796
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ccacgcgtcc ggactcactg aatgagctcc agaccactgt ggagggccag ggcgctgatc     60
tggctgacct gggggcaacc aaggaccgta tcatttctga gattaacagg ctgcagcagg    120
aggccacaga gcatgctaca gagagtgaag agcgcttccg aggcctagag gagggacaag    180
cacaggccgg ccagtgcccc agcttagagg ggcgattggg ccgtcttgag ggtgtctgtg    240
aacggttgga cactgtggct gggggactgc agggcctgcg cgagggcctt tccagacacg    300
tggctgggct ctgggctggg ctccgggàaa ccaacaccac cagccagatg caggcagccc    360
tgctggagaa gctggtcggg ggacaggcgg gcctgggcag gcggctgggt gcccttaaca    420
gctccctgca gctcctggag gaccgtctgc accagctcag cctgaaggac ctcactgggc    480
ctgcaggaga ggctgggccc ccagggcctc ctgggctgca gggaccccca ggccctgctg    540
gacctccagg atcaccaggc aaggacgggc aagagggccc catcgggcca ccaggtcctc    600
aaggtgaaca gggagtggag ggggcaccag cagcccctgt gccccaagtg gcattttcag    660
ctgctctgag tttgccccgg tctgaaccag gcacggtccc cttcgacaga gtcctgctca    720
atgatggagg ctattatgat ccagagacag gcgtgttcac agcgccactg gctggacgct    780
acttgctgag cgcggtgctg actgggcacc ggcacgagaa agtggaggcc gtgctgtccc    840
gctccaacca gggcgtggcc cgcgtagact ccggtggcta cgagcctgag ggcctggaga    900
ataagccggt ggccgagagc cagcccagcc cgggcaccct gggcgtcttc agcctcatcc    960
tgccgctgca ggccgggggac acggtctgcg tcgacctggt catggggcag ctggcgcact   1020
cggaggagcc gctcaccatc ttcagcgggg ccctgctcta tggggaccca gagcttgaac   1080
acgcgtagac tggggtcccg cccgacgtgt ctacgtcggc tgaagagaca gcggggggcgg   1140
cgggctcctg gggtctcgcc tgagacgggg cacctagccc tgggcgagcg ccgcacccgg   1200
gcccgcagcg gcaccgcgcc cagagcggcc tctccccacg cccggggcgc gccggctcag   1260
ggaggctcgg ggccgcccat gcagactttt ggcctggcgc gatcccccaa gaacccctcc   1320
agggccggcc tgcggaggag ccgatcctcg caccctccgc tccctccact ggccctccag   1380
gtcgattccc tgggctccag gctcccccgc gcgggcgccg cccgccgcca tactaaacga   1440
tcgaggaata aagacacttg gtttttctaa aaaaaactaa aaaaaaaaa aaaaaaaaa    1500
aaaaaaaaa aaaaaaa                                                   1518
```

<210> 797
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472

<211> 1498
<212> DNA
<213> Homo sapiens

<400> 797
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ccacgcgtcc gctgtacgtg taggtggttc agatcctgcg taatggcagc atgaggactt   60
aaaaggtggt tttcattttg aagatggcta tgtagcttgt aaggtgtatc acagcagtac   120
ctctcatggc ttttttggttc cagcagtgag ggcattggtg agatcaatgg taaactgtgc   180
aagctttctt tttatcatta ggaaatgtga aacgttggac aaattttgag tttttaacaag   240
gacaaaaagt tgaaagaaaa ggcacagtta acaaaaaagg gtggctagat ttatcttggg   300
tgatggagga aatgagagag gaatgctctt gaaaggtggt ctgtggatct gtctgaatag   360
aaagagcaca gtaagtatgc attgccggag aaaacgtcct tgaagctgct tgtctcatgt   420
gtatgatgtg ctttttaaat catgcccctc gttgcctgcc taatctgtga ctccctaaaa   480
actaactggg cccatgtaga tggggctgca accagagctg aataacatgt taggctcaca   540
catgcatcag cactgcacac tggaatcatt gctcttcctg gactttgtag aaatcagtct   600
caagtgcttc aagagtctgg ctcctgctac ttttatctgt caggtagcac ataaggtttg   660
cagggttata ttttgtatag aatcacagtt gtggagaaaa agtaataatt tctcaatgaa   720
ttttaaaaat gggcctattt tctatccccg tggttcatct gatataatta atgttccctg   780
tgaattcccc ccctctatgg gaaggatgcc tttactcttt atcagtaata aattatgacc   840
tgttttcata ttgccttagg gttatttccc tgtgtaaacc attgtctttt gttttggttt   900
tctttagcat tatgaagctt tggtattgta caaggtcagt agtaagatgc tcactagtct   960
cagggcttgt gtaatattct gggaggtcat ttaaatgcca gaaatggtca agcaattata 1020
cacagtattt atgactctgt taagcatacc gtttgtctgt cacattagta gattctgaga 1080
ttaaaaaaaa tttttaaaga gtgatcattt aaataatttc taaaagggtc ttttcaagct 1140
ctaacaaagt cactaacaaa tgcattattt tctacagaat tagatgttag tagtacagta 1200
ctgcatattc agggaaaaag tgtgaggaat tgatttcaaa atagttcgtt cttgtgtttg 1260
acctaagaat gattgtcgca tgaagtgttt gtttttacag tttagcatat ataaacaaac 1320
atgataggat tccttaagat gttaccaccc aggggccac aagccagcct gctgtctcag 1380
gaagctgtag aaggagtgtt tgtcaatttc ttgtcactgg tttgctgact tactgaggat 1440
taattgttgc cttacaatgt tactgaaata aactgtttaa tataaaaaaa aaaaaaaa   1498
```

<210> 798
<211> 1626
<212> DNA
<213> Homo sapiens

<400> 798
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ggcctggggc ccctcgtccc aggcaaggtg gccgccacca gcgtcatcac aatagtaaag   60
tccaagacgg atgcccgatc gtagggacgc gcgtctgccc aggcgggtct ttgcggggcc   120
actaggcaca tggcgaattt ggctgccctg tccctctgtt tccttctctt ctctttcctc   180
cctctcttcc ccacccttct ctcttccctg caaagcacaa cctgtacccc aggggcgccg   240
ggctgagccc ctttgatctc gtcattgtcg tcgtgtgttt tgtatgttgg gattggtcag   300
ttcggcggtg acgtggggtc gccccaaccc cttttgtacc agggccatgc aggcttggag   360
tccagagttg gtgctgtggg aacggactag agagagttgc gggagagaga aggagcaggc   420
acgctgggcc tcgcgtgtcc ccgagcagtg agggtcccag tgttccctcc actcccgagt   480
ggccacaggc tcgcgggctg ggaaggattc actctcttta gccccagggg agcagctcag   540
cttagcccag catgaagaga tgggctctgc tctgagagta gggcgggctt gaaggccctg   600
atgggtggac caccagcctg ggcgcagtgg tgctgggggc gtgcagctgg cccaggggc   660
tgtgcactca ggcctgaccc gttgcactga acaagaccaa atcgctggtt gtgcgcttaa   720
cgtgagggtg ggtccagtgt gccctgcgat gggtcccgtg tcactgttta catgacctat   780
ttgtgtggtt atatagccct ttatttaaaa gagagaagtt ccttttacaa agttattaaa   840
ttaattatat gtttaaaagt taaagaaaaa agagctgcag agtatttata aaactgtctt   900
ttagaaaaaa aacaagcaag aagaccattt gaccatatga atggaaaagg gaagaaagta   960
taatagaaac tttgctagtt aaaaaaaaaa gaaaaaaaa gaaaaaaaat cccttccttg 1020
taaacttacg gacacctctt tgtggctgtt ggagtttagt tttttatatac acagagttat 1080
cagacattat ttataaaact tagtttaaaa aaaagacaaa aaaaaaaaag ccaagccgtg 1140
agccgaccag aaggccgtcc tctttgatat cttttgcaat tgtaccgaaa gtgacttact 1200
cctctgccct tcctgcttcc gtctcttgcc ggtgccgtgg tgtcgtccgt gcctggtgag 1260
gttttgtgca gcggtaaagt gctggtgctt ctggtgacct ttgacctgtg ggtgtcactt 1320
cttgtgtctg tttttcccgtg ttcgtttttt gggtttagtt gtgcttttgc ttctgctggc 1380
ttgctggacc tgggctgggg tgccaagtgg cgcctgctgc gtcagagctc aaggaatctg 1440
```

```
tgcccaccac cagctcctgg tccgtagagg tgagacatgg ggktctgyca tgccccCctc    1500
cactgagcct tggctacatc tgtgtctaag gcttgggctg atctagtggc ggggtaagtg    1560
aaactggggt cccttggggc gccccacgct gcttccacaa ccaacaactc tggccttggg    1620
tggtgg                                                               1626
```

<210> 799
<211> 669
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (75)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (97)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (108)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (202)
<223> n equals a,t,g, or c

<400> 799
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tgggaggttc ttttataagc agngctcgtt tagtganccg tcagatcgcc tggagacgcc     60
atccacgctg ttttnacctc catagaagcc accgggnccg atccagcntc cggactctag    120
cctaggccgc gggacggata acaatttcac acaggaaaca gctatgacca ctaggctttt    180
gcaaaaagct atttaggtga cnctatagaa ggtacgcctg caggtaccgg tccggaattc    240
ccgggtcgac ccacgcgtcc gccctgggga gcttgttctt caccagcaac gaaactcaga    300
cagcaatgga tgactttctt ctggctgatc tggcctggaa cacgatggag tctcagttca    360
gctctgtaga aacccagact tctgcggaac cacacacagt ctccaacttc taaaactaac    420
ggtggagtcc atgtgtgaaa tggcatctac catttcctct ggattaaaac tacggactgg    480
ggacaacagt attaattcga ttgaatgtgg ctgatgatgc agttgcttag cttctttgtg    540
tttctttgcc ttttgtactt gtaaacagaa atttgcgtat aaatgtgagt gtattataaa    600
gtttgagatg ttgatctaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    660
aaaaaaaaa                                                            669
```

<210> 800
<211> 2791
<212> DNA
<213> Homo sapiens

<400> 800
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gtcacctgac acctcaccgg tccggaattc ccgggtcgac ccacgcgtcc gcccacgcgt     60
```

474

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ccgtaatccg tggttttctg gagcatttca cagcctagga acatacaagg ggggcatctc        120
cctggaatgt aaattgacta agaggaattc aataatggtc aaatgaatgc agaatttag          180
agtcttgctt agtattctca ccacatttcg tttartctac tcatactctt tttctcttac        240
tgctgacact agatggaaaa actcttaatt aaaagtattt cacaaaatgt gctcgttttc        300
agtcattccg tttccactcc agcctgttgt gttgttttt tgaaataata atttaaagta         360
attttccttt tgcaggatgg catagtcaat ccaacaataa gaaaagattt gaaaactgga        420
ccgaaattct actgctgtcc aattgaaggc tgccccagag gccctgagag accgttttct        480
cagttttctc tcgtaaaaca gcactttatg aaaatgcatg ctgagaagaa gcacaaatgt        540
agtaagtgca gcaattcgta cggtacagaa tgggacctga aaagacatgc agaggactgt        600
ggcaagacct tccggtgcac atgcggctgt ccctacgcca gtagaacagc actgcagtct        660
cacatctacc gaactgggca cgagatacct gcagaacaca gggacccacc tagtaagaaa        720
aggaaaatgg aaaactgtgc acaaaaccag aagttatcca acaagaccat tgaatcattg        780
aacaaccaac caatccctag accagacact caagaactag aagcttcaga aataaagcta        840
gaaccatctt ttgaagactc ttgtggctct aacactgaca agcagactct tacaacacca        900
ccgagatatc ctcagaagtt gcttttacca aagcccaaag tggctttggt taaactaccc        960
gtgatgcagt tttctgtcat gcctgtcttt gtgcctacag ccgactcctc agcccagcct       1020
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gtaggaaccc tgatcctcgg cctagattca gaggcttgct ctcttaagga gagcctacct       1140
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gattctcaag tgtctcttcc cattagtgtt cacactcaga cattttgcc cagctctaag        1440
gtaacttcat ctatagctgc tcagactgat gcattatgg acacctgttt ccagtcaggt        1500
ggggtctcca gagaaactca aaccagtggg atagaaagtc caacggatga ccatgtacag       1560
atggaccaag ctggaatgtg cggagacatt tttgagagtg ttcattcatc atataatgtt       1620
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agcttttccg tgagtactga ttcatctgac acagagaccc aaactgaagg agtctccact       2280
gctaaaaata tacctgctct agaaagcaaa gttcagttga acagtacaga aacacagacc       2340
atgagttctg ggtttgaaac cctggggagc ttgttcttca ccagcaacga aactcagaca       2400
gcaatggatg actttcttct ggctgatctg gcctggaaca cgatggagtc tcagttcagc       2460
tctgtagaaa cccagacttc tgcggaacca cacacagtct ccaacttcta aaactaacgg       2520
tggagtccat gtgtgaaatg gcatctacca tttcctctgg attaaaacta cggactgggg       2580
acaacagtat taattcgatt gaatgtggct gatgatgcag ttgcttagct tctttgtgtt       2640
tctttgcctt ttgtacttgt aaacagaaat ttgcgtataa atgtgagtgt attataaagt       2700
ttgagatgtt gatctaaatt gtttttgtgt tgcctacatt tgcctttca cagctagtct        2760
tttcawgtta aaaaaaaaa aaaaaaaaa a                                         2791


<210> 801
<211> 2791
<212> DNA
<213> Homo sapiens

<400> 801
gtcacctgac acctcaccgg tccggaattc ccgggtcgac ccacgcgtcc gcccacgcgt         60
ccgtaatccg tggttttctg gagcatttca cagcctagga acatacaagg ggggcatctc        120
cctggaatgt aaattgacta agaggaattc aataatggtc aaatgaatgc agaatttag          180
agtcttgctt agtattctca ccacatttcg tttartctac tcatactctt tttctcttac        240
tgctgacact agatggaaaa actcttaatt aaaagtattt cacaaaatgt gctcgttttc        300
agtcattccg tttccactcc agcctgttgt gttgttttt tgaaataata atttaaagta         360
attttccttt tgcaggatgg catagtcaat ccaacaataa gaaaagattt gaaaactgga        420
ccgaaattct actgctgtcc aattgaaggc tgccccagag gccctgagag accgttttct        480
```

475

```
cagttttctc tcgtaaaaca gcactttatg aaaatgcatg ctgagaagaa gcacaaatgt    540
agtaagtgca gcaattcgta cggtacagaa tgggacctga aaagacatgc agaggactgt    600
ggcaagacct tccggtgcac atgcggctgt ccctacgcca gtagaacagc actgcagtct    660
cacatctacc gaactgggca cgagatacct gcagaacaca gggacccacc tagtaagaaa    720
aggaaaatgg aaaactgtgc acaaaaccag aagttatcca acaagaccat tgaatcattg    780
aacaaccaac caatccctag accagacact caagaactag aagcttcaga aataaagcta    840
gaaccatctt ttgaagactc ttgtggctct aacactgaca agcagactct tacaacacca    900
ccgagatatc ctcagaagtt gcttttacca aagcccaaag tggctttggt taaactaccc    960
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gtaggaaccc tgatcctcgg cctagattca gaggcttgct ctcttaagga gagcctacct   1140
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tttggtaaaa gtccatctaa tcctttacaa gaactaggga acacgtgtca aaagawtagc   1260
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gcacagtggg ccactgctga ttcctctgtg tcgtcttgtt ctcaaactga tttgtcgttt   1380
gattctcaag tgtctcttcc cattagtgtt cacactcaga cattttgcc cagctctaag   1440
gtaacttcat ctatagctgc tcagactgat gcattatgg acacctgttt ccagtcaggt   1500
ggggtctcca gagaaactca aaccagtggg atagaaagtc caacggatga ccatgtacag   1560
atggaccaag ctggaatgtg cggagacatt tttgagagtg ttcattcatc atataatgtt   1620
gctacaggta acattataag caacagttta gtagcagaga cagtaactca tagtttgtta   1680
cctcagaatg agcctaagac tttaaatcaa gatattgaga aatctgcacc aattatataat   1740
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<210> 802
<211> 1025
<212> DNA
<213> Homo sapiens

<400> 802
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gtaaagatgg agaacaatct tgctgagttt gaaagaaggg cagaaaagaa tttattaata    180
atgtgtaagg agaaggagaa gctacagaaa aaggcccacg agctgaagcg caggcttctc    240
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cccttcgagg cagtggccac acgcttcaag gagcaataca ggacattcgc cacggccctg    360
gacactacca ggcacgagct gcccgtgaag tccatccacc tggagggaga tgggcagcag    420
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tgttggtgat tcggaagaaa atgtgcaggt gctggactta ctgagcgaac tcaaggacgt    540
gaccgcgaaa aaggaccttg gagctccgaa ggagctttgc cccaggtgct ggaactctcc    600
gcagaggcaa gcaaagaggc agccttggca aaccaggaag tctgggaaga gacccagggc    660
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caggccacgt tcatcagccc aagcgaagat ttttcttcaa gcagccaggc agaagtcccg    840
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gagcacttta tatactaccg tagcactgta gctatttttt atgtgataat cttgtttgat      960
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aaaaa                                                                  1025


<210> 803
<211> 920
<212> DNA
<213> Homo sapiens

<400> 803
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tactgtccaa gtgttgtgct aacagtaagc catttcttaa gttttttgcc ttgattaggg      180
tgccctaatt tgagggtttt aaaaaaaact atattttgt taattataaa actgtaaaga      240
gctataaaag ctattcccat ttggttagtc aaaagggttt tattgctaaa tgtttggtgt      300
aaagttgaga ccctttttcca ttttggtgac agattctttt ggggaaaaaa ggcagctttc      360
tgttttataa atgcagactt ctgtttattg aatgaagcat atctcagtgt ttatctgtca      420
ggttttgaaa catttcatat atgtccaaat acttggcagg atttaaaaaa aaatagtgaa      480
tttggtgtaa agttgctatt ttatggaaat gcctctaact ttacattttc attccatctg      540
tagatttttc tatctttata aaatattgga gttatttttt aaggaaaaat agaaaagtag      600
cttgtgaata gctcaaacta agcttacaaa tcgcatgtaa aaaagcaaaa aagttatttg      660
tgtctgttta tattgcttcc tttttgtag cctttgtacc tgtacagggt gacagtaagg      720
gccaagcagg agaggcgtaa tccttgtata aaataggatc cagcgacact cttgtattta      780
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aaaaaaaaaa aaaaaaaaaa                                                  920


<210> 804
<211> 815
<212> DNA
<213> Homo sapiens

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aagaatgatt gtgtgtgagt ctgttaatgg ctgtgtagag ctatatctct atatggagct      420
atataaaaat atattttata catgccagat tcatttagac ttgaattgac cctgtggtaa      480
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tgcagttacc atttaatctg tgacttcttt ttgagatgca gaaaactcc attataaagt      600
gctcagttca tccagggaca cagacacact gtgggttata acacaccctc atctgcatgg      660
tgaggtacat gagtcagctg ctcttctctc aggagggtgg ctttaaagct ccacagtcat      720
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<210> 805
<211> 586
<212> DNA
<213> Homo sapiens

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agtccttcac cctcccagga actgtacttt gaaacttccc ataatcctcc actgtgatca      300
taatgtttca gctcaccttc caggcaggcc taggaatcac atgtctggga cacacacatg      360
ccattatcac caaatagatt tcttgatagt catttaaagg acccttcact gtgcagttta      420
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477

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cagtttcaaa gtattttcac acatctcatt tgatcctggt gacaatccca ttaaataagc    480
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acttgcccaa agtttgacag cagtacaggg aataatgcca gacata                   586


<210> 806
<211> 246
<212> DNA
<213> Homo sapiens


<400> 806
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ttgttctttt tcctaactta ttcaggacag gagagagaaa gggaagtatt attggcccac   180
tttgaaaacc tcaaacattt gcactgtgag attgggaaat aatgttttga cggtatagaa   240
agaaag                                                              246


<210> 807
<211> 1701
<212> DNA
<213> Homo sapiens


<400> 807
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ttttactatt tccacaatgc tctccgtggc tgataatttt tcgctaactc catttatttc   180
attaattagg ttagtactag aaaccagtgg aatatcatta ggtgctacac tacagggttt   240
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<210> 808
<211> 2593
<212> DNA
<213> Homo sapiens


<220>
<221> SITE
<222> (16)
<223> n equals a,t,g, or c




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<400> 808

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tgctccctcc tcgggctgca tttcaaaaat agtcatattt ttaaaggagt tggaggagag     180
ggaggggggag gacatggcac cattccagaa accagcattg ttacaacacc atagccagta     240
tatttagttt ggcttttcct aacatagaaa tcttcaaagc tggggaagtg gaaataaagt     300
tttaaaaatg agagagcagt tttccaacta tgtcaacaaa gcctatcgtg ttgatgtttt     360
tattgaccat tttagcaaca ggctaataaa atttcaaatt gaattttta ttttcatggc       420
tttaatccat gatagtttaa atactggggg ccattaagag tggatgtagc taagagctta     480
gctaacattg ccttttcact ctattttct cagatattgt aagcattctg ttttttcaata     540
ttgtagttaa ttttttggct ttcaacagca gccctagtaa tggtggagtt gttaattaat     600
gtgtatattg tactgaattt ctgtcagtta aggggttcac tgctttggtg gaaattggtg     660
gaaattgcta gcaggttcca cgatgtttat tttttctcc atgttgtata tcattaccat      720
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<210> 809
<211> 728
<212> DNA
<213> Homo sapiens

<400> 809

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attcaaagtt cttttttcttc cttctctttt tcatctaagc ctgtgcttat gagtagaaaa     180
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tgtttggaaa ggaggatgag gattatttt caaatacata attttgtttt attttgaaac      420
aatctcacac ctacagaaaa gttgcaatta taatacaaag agcttcccc tcgcctgaac      480
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acaccagttc attttgacca tctgaaattc aggtgtcatt catgttttgc cagttgttct      660
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cccaatcc                                                               728


<210> 810
<211> 1697
<212> DNA
<213> Homo sapiens

<400> 810
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tggagggcca ttacctacat ctggctctac tcactggcgt gggcaggagc acctctcctg      180
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aaaaaaaaaa aaaaaaa                                                    1697

<210> 811
<211> 2047
<212> DNA
<213> Homo sapiens

<400> 811
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ttcctgcagc cgtctcagct atgacaagtt ttttgaagat aaattatcaa attgcctctt      180
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gaaagatcag aggccactat ctaccactgg caccaggcca cacaaacaga agaggaaacc     1140
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<210> 812
<211> 1805
<212> DNA
<213> Homo sapiens

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481

<210> 813
<211> 1804
<212> DNA
<213> Homo sapiens

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<210> 814
<211> 1238
<212> DNA
<213> Homo sapiens

<400> 814
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<210> 815
<211> 2272
<212> DNA
<213> Homo sapiens

<400> 815

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<210> 816
<211> 2811
<212> DNA
<213> Homo sapiens

<400> 816

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<211> 1758
<212> DNA
<213> Homo sapiens

<400> 817
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484

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<211> 1918
<212> DNA
<213> Homo sapiens

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atgaactacc atttataact tctgtttttt tattgagaaa atgattcacg aattccaaat   1260
cagattgcca ggaagaaata ggacgtgacg gtactgggcc ctgtgattct cccagccctt   1320
gcagtccgct aggtgagagg aaaagctctt tacttccgcc cctggcaggg acttctgggt   1380
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tacgttgggg actgcctgta tttggaagat ttaaaaacct agcatcctgt tctcaccctc   1680
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agtgcattcg gtgccaacat tttttagagc tgtaccaaaa caaaaagcct gtactcacat   1800
cacaatgtca ttttgatagg agcgttttgt tattttttaca aggcagaatg gggtgtaaca   1860
gttgaattaa acttagcaat cacgtgctca gaaaaaaaaa aaaaaaaaaa aaaaaaa      1918

<210> 819
<211> 1817
<212> DNA
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485

<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (60)
<223> n equals a,t,g, or c

<400> 819
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ctgtgggccc ggccttaggg tggaggcttt agtgtacagg gacagccatg gccacacagc   180
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actgcaccag tggcagctgg tgactgtgga cagtggtgga ccctgcttct gtgcacctgc   300
tgcaggctct ttttatgaag gctttcatga attttagtat gtaatacgca ctgacgacac   360
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acatggtgcc ctgccctcac ccaccctctg tgtttcccct tctttgaaaa ggtagaagag   540
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ctgccaagca tgggtatgaa tcgtgcacac agccatgctt caaggccggg gcaggggagc   1680
ctgtgctgat gccatccaga gcactgggct gtgcctggaa ggcgagcctt gattgtctga   1740
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aactcgagcg gcacgag   1817

<210> 820
<211> 960
<212> DNA
<213> Homo sapiens

<400> 820
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atgtgggggt gacagagggt ttgctgggct ggctttgctt tccctgctgg ggccacagct   180
gtgttaacca atgaggtctg ctgccaggtg tgaacaagca tgtctctacg aatgaacgaa   240
acattgggga tctctgccga aaccaccaaa gggcatgtct gatgggcaca gggtctccca   300

486

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aacccagtgg cttctgtctg tcctcagccc ttgtccctgt ttatctgcag ccaggagact    360
tgcaagggat tggtgattga cagagaggac tcgtgcgctg ttttgtgtta gcagaggatt    420
tgtgtttTca caggtaggct tagcgtcctc tcagagtgta gtgccaggtc ctggtgccac    480
gctagctgag cactcaggag agttcatcag ctcagatccc acagggcctc ctctttagca    540
ggaattcaca acagtttgga tgccctaaac ttctgtagct caggaacatc actggtgtat    600
ttgtttttTtt gtttgtttgc ttgggttctt gcaagagcgc gtggggacag ttcttccagc    660
aggcactggt tttgttgccc cagggctgct ttgctgtgat gatgattgca tttcaacaca    720
tgccagatgc agattttTtc ccccttactg tttcaatgac ctttatttta aaaacacata    780
gcttgaaaat ttatttTtat actgatatta gtttggatgt gccactttTg gcaccaaacg    840
tgtatgtcat ttttatttcc attttataaa catgtaaata atagtgataa cttgttaata    900
atagtaaacc tttataccta aagtaaatgt cttccctccc acaaaaaaaa aaaaaaaaa    960

<210> 821
<211> 636
<212> DNA
<213> Homo sapiens

<400> 821
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gcaatcacag tctttaatca ttaattgtca tatttctgat ttgttagcaa gtgccagctt    120
gtaggctggt tgaagtacag aactcagagg aaaaaagaaa ttaaatttta gctttctgga    180
gagcagcccc tctctggcac catcaaacac ttctttgttt cccttcaact tggaactctt    240
caaacatcag gggttgtgag ggtttggcca ttcttttatc ttgggtccat gtgagtgaca    300
gaaatggtgc ggcctgggaa agatctccct cctttacatt ttctcttctc cctcctcctc    360
cttattctaa aactgtgcct ccaacagagg ggcaggggct cttgtagaga gatccctggc    420
ccaggacagg agatgccaaa tctaatttat ctcactgagg gcctttgaga aaaacgcttc    480
agggccaggc tcagtggctc atgcctatat aatcccagta ctttgagaag ctgaggcggc    540
agatcacttg aggccaggag ttcgagacca gtctcgtcaa catggcgaaa ccctgtctct    600
acaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa    636

<210> 822
<211> 1095
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> n equals a,t,g, or c

<400> 822
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aggagagatg gcatccagtg gacagaggag ttcattttTc agggatgact tggttgrtct    120
gccttcctgg gccarcgtgc aggcaacccc actggggcca gagcatcctc tccgtgagty    180
ctcatagctt ggatctaacc ctggtcatgt tggatttcca ttcctcctgg ccttaagttt    240
ttttttttctt gtttgtttgg tttttttttt ttggagatga agtgcagtgc agtggcacaa    300
tctcagctca ctgcaacctc cgcctccagg gttcaagcga ttctcctgcc tmagcctccc    360
gagtagctgg tattacagac gcytgcmacc gcamccagct aattttkgtt ttkgtttgtt    420
tkgtttTtttt aaattttTatt agaagtgagt ttcaccatgt tggcctggct ggtcttgaac    480
tcctgacctc aagtgatcca cccacctcag cctcccaatg aaggtgtttt ttgaccattc    540
ttataccttc tcttctgtct cagggcatcc ctcccccatt cagagaccac catcaagggt    600
caagggtata actagtcctg attcccaagc aaggggccaa aggtgtcagc caggtagatc    660
atgcttttcc tttttgcacc tgttgggtct tcaaattctt tctttggtaa tccccattgt    720
tttctgtgag ctggtccttt tcctaccatg cccaggttga actctccatc tgcctgccca    780
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agtggccttc tgtctctccg tggtttggat gcagtgccca cgagcttgcc tgagtgcaca    960
ggtatccctc tcgctctcat ggagcagctt gcagggggct ctgtgaactg gtccctgtgc   1020
ctactttTtgg ggatcctgtg ataagcagtg tcttcctgag tgcccccttc tcactgtgga   1080
catcagaggc cccag   1095
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487

<210> 823
<211> 513
<212> DNA
<213> Homo sapiens

<400> 823
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ggaaggggat tcctcattgg atatcattta tggcccagta agtgtcccat aattttcttt   120
aagctccatc tatgtaaata tttttgaaca attttgcaca agtacagggc cacataccta   180
tttgttataa acccgacgtt gataaaatgc actcttagta taattgggtc ttgtttttgat   240
cctggcagtt tcatattggg atttggcagt gagttcaaca gaataagcat tatcctcttg   300
aggcccatct aggattgaac taaagggctt ctacaatatc cacatgatca tacaattagt   360
tctctctctc cctctctttt ttttgtgctg tgatagtgta actgaatatg agctggttgc   420
cagggtattg tggtagaata ataccctgca gtaaacagtt aatcatgcag cagaactggc   480
ttgatttaaa aaaaaaaaa aaaaaactc gag   513

<210> 824
<211> 796
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (755)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (762)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (773)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (789)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (792)
<223> n equals a,t,g, or c

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aatttcacca cttaacatcc tattattttg cctattcccg tcaaatcttt atgcatgtgt   120
atttacactg ttataaacat ggtgtgcaaa ctatttgttg ttgggctatt ttcacctcac   180
atcaagactt gaaaatgccc ccaagtttct gtatatttct gtttctgttc taatgactta   240
catggtcgca tgatagtcat tgtgttacag tggcatatct tatttgatca ttcctgtctt   300
ctggaaccat tacgtttgtt ctaattttta gctcctgggt aacacctcaa tctgtgtctt   360
ttatgaatat gtcactttgc ttcttgttgc cccaggaata cataggcacc agaggccacc   420
ttgatagtgt tttgtgtggc ctgttaggct gagtctaggg atcactggga attagctttg   480
ggaaggtggg catcttaggc ccaggctgat gaacttcaat tttactgtat tcttcatcag   540
ccattggacc ttcctttgac tacagcccca atgctttct aatttggctg aaaatattta   600
catttataaa aaattawtgg ctgggcacaa tggktcacac ctataatccc aacgctttgg   660
gaggttgarg tgggaggatc acttgagccc aggagtttaa aaccagccta ggcaacatag   720
caagaccca aagctaccaa aaaaaaaaa aaaanaaaaa cncgaggggg ggnccgggac   780
ccaattcgnc cnatag   796

488

<210> 825
<211> 2238
<212> DNA
<213> Homo sapiens

<400> 825
gagagaaagc accctctcaa cagtgcaaca tcttttaaag ccacctataa tgaaagaata   60
ggtacaatgg ggacagtgtg gcaaaaataa aatcacttcc caaagatttt cagtcagaaa   120
gctgaaaaat cattttttcct accttttgtg tatttgcctg ccagagaatt ctgttctgcc   180
ttccacctca cagatgtgct ccagatccac agaaaagttg gtccatagga gaaaaatggc   240
aattgaattt tatgtatttg ctttctttgt tttgatagaa ataattccct cctccttgtc   300
tgcatatctc atgactcctg ccttccaaat acataggttc acattctcaa tatgaaatct   360
tataaactac atattttaca gcagccacct cagcagagaa gtgctcctga catctctttc   420
accatcgatg cgaataagca gcaaaggcag ctgattgctg agctagaaaa caagaacagg   480
tgagactttg tagacgtgct ggcttgtttg atcaatgtgc gcattcctta ataaactatg   540
gtcgtgcttt aaagtttcag ggctttacac cctgtatggc tactcaaggg aagacatcta   600
cactcagtga tgctcacttc caaaaagctg gtctttagat ctttagaact tcagaagctc   660
catgagaaaa cggcgtgtgc atgtatgtgt atagttctga gatatcaatg caattaatgt   720
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ctagtacagg aggaccctcc tgggtactag gtagaaggtg tctctaccac ccagaaacag   840
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gacaccacca tcacccagtt actctccaaa catccaaaga tctccacctg cagcccatca   960
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tgacatttga ggtcaaactg gaggagtaaa ggaggaggtt gtgataatta tttcatgcct   1920
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ggaaagcttt tggcttagtt gtcttgagac ctggctgcca tcattaggaa accacaaatt   2100
aggatagaaa tagcttcata aatgtgacac catgactcca tcgcctttga aactactgct   2160
ctactctgac ccccagggag atgtgctcac atcagagctg gaataaaaaa atttaaaaat   2220
aaaaaaaaaa aaaaaaaa   2238

<210> 826
<211> 499
<212> DNA
<213> Homo sapiens

<400> 826
acgagggata atggtggtaa aggatgtacc agacagtcat ctcctgaaga gatgccgaac   60
aacctgtcct tgtttttatgt attttctctt tctttcctgt ccagttttat tcctctcata   120
gtaactgcta aaaaaatgtc agttcctgtc actcttccac cccttttctc cctctcccct   180
gcattgtggt ctgggccttg gtccactagc aactcccctt aggtgttgct taatctgcct   240
catggccaaa gccaatccca ttcctgtccc ccgctaccca agggactccc agtctgtatg   300
cacaaggcgg gatgtgaagt ctggatgtgc aagaaaccca gctgtaagaa agagcttccc   360
tcggcttggc atggtggctc atgcctgtaa tcccagcact ttgagaggtc aaagtgggag   420
aatcacttga gcccaggagt tcaggactag cctgggcaac atagcaagat ctcacctcta   480
caaaaaaaaa aaaaaaaaa   499

489

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<210> 827
<211> 788
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (4)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (11)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (41)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (61)
<223> n equals a,t,g, or c

<400> 827
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nccacagggg gaagcactgg gactcatcag gaggctgagg gagagaggga aaaagggagc     120
ggggagaggc aggaaacttt attgtgattt tcatgcatca gaatgtgcta ggcagagtaa     180
gctggcttag gattggcttg tttgaattat ttcaatgggc tctggggcat aggggctgcc     240
ccttgttgtc aggtgccagg gcctggggtg atgagggcag gggatagtgg gctgragtgt     300
gagartccca gagaggaggt ggctggggtg taggctctgg actggttggt ttgcatatgg     360
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taaaaatata aaaattagcc aggcatgatg gtgtgtgcct gtaatcccag ctactcggga     660
ggctgaggca ggagaatcgc ttgaacccgg taggtggagg ttgcagtgag ccaagatcgc     720
ttcactgcac tccagcctgg gtgacagagc gaaactccat ctcaaaaaaa aaaaaaaaaa     780
aaactcga                                                             788

<210> 828
<211> 3011
<212> DNA
<213> Homo sapiens

<400> 828
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gaatgctctt ggtgtggttg catgttacag tggtattgga aattatgccc ttgctcagca     120
ctgtttcatc aaatcaatcc agtcagaaca aattaatgct gttgcatgga ccaacttggg     180
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agtgttatac ctcacaaatg aaaacattga gcaagctcat gaggctttca aaatggctca     240
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tggaagttat gacaccatgg atctcttcag gcacactaca gaactaaata tgcatactga     360
aggagcatta ggttatgcgt attgggtctg cacaacattg caagataaaa gcaacagaga     420
aacagagctg taccagtaca acatcctcca gatgaatgct attccagcag cacaagttat     480
tttgaataaa tatgtagaaa gaattcagaa ttatgcccca gctttcacaa tgttgggtta     540
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gttgttacag actgcagaag accaagatac ttacaatgtt gcaataagaa attacggcag     660
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agagagcagc aaagcctatg agagagcctt gtctattgtt gaatcggagc aagacaaagc     840
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ttatgcactc caaggccgca gtgtggctgt gcaaaaacaa atatctaaag ctgttcacag    1140
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acgaaatgca aagggaggtg ttgtagcagg aaatgtggct catattctgg actcaaatca    1260
tggaaagaag gcattactgt acactgcggt aaatcagttg gctatgggaa gcagttcagc    1320
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tgatcctgct atctgggctg ggctaatggc agcctgtcac gctgatgata aactggcctt    1440
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aaaacattaa tggaaaataa tgctgataat atttaattga tcatgcaatt ccttcaatta    2940
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aaaaaaaaaa a                                                         3011

<210> 829
<211> 1445
<212> DNA
<213> Homo sapiens

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attgagcccc tacttcaagt actccgtcat gatcaacaag gccacgccct acaactaccc     180
agcggctggg gaaaagggcc acaggataga gctcagctcc cactccactc aacgccaaag     240
ctgtcctgga gccagacggt cctgagctct ggcactggag gcctgggagc catgcccttg     300
accagccttg agacctcgag caagacaagg caaccattct gaggctgagt ttcctgctct     360
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491

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gcaaacgaca tgacaccctc ggctggatgt tgcagcggtg acactgaagt agtgacacca    420
gacgatttct gtacttaatg tgatgtcagc acttagtaaa cattcatatc ccctgcctcc    480
agagttcctt aaggttcaat tgatggaatg cctcctctgc accagcacct gggcagtgga    540
gacggagttt caccgtgttg gccaggatgg tcccgatctc ctgacctcgt gatccgcctg    600
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caacttaagt gaaaatctca cctgtggcca gcggctaccg tgctggacag cacagtgctc    720
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attggccgga tgttgtggca catgcctgta atctcagcta ctcaagagtt tgaggtcggg   1380
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aaaaa                                                                1445


<210> 830
<211> 1003
<212> DNA
<213> Homo sapiens

<400> 830
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caagtcagag taagcctggg atgagacttc agagctgctc ttctcagact gcagctctgc    180
tcctcagttt ctacctccca gagtcttgtg catcccagag tccaggctga accgggccct    240
ctggcccagc gagtcctttg cattcctagg caaggctggt gcgtactagt gaacatctcc    300
ctgatgtggt attattaggg attgaagagt tccctgagc atgtttggtt ttctagatac    360
aagttgagta ttccttatcc taaatgcttg ggtttcagtg tttggggttt catatgtttt    420
cagattttgg aatatttgcc ttacacttac tagttgagca ccccaaatcc gaaatctgaa    480
atccatgctc cagtgaacat ttcctttgag cagcatattg gtgctcaaaa agtttcagat    540
tttggaacat tttggatttc agattttcag atttgggatg cccaacctgt aatagaaatt    600
tactcattta ctcatttaca taccaaacat ttaacatttt ttggcttcct taaattagta    660
tgctgaactt aataaataat tggaaaatgt ggagaaattt atgtatgtat ttatttttaa    720
ttgggcagcc cccaaaccaa aataggttca gagaggctcc atcatttttt aaataagcta    780
taattttcag cctggggaac ataggcgac cctgtctcta caaaaacttt aaaacttagc    840
caggcatggt ggtatgcacc tatagtccca gctactcagg aggctgagat gggaggattg    900
cttgagcaca agagttccag gctgcagtga actgtgattg tgccactgca ctccagccag    960
gggcacacag caagaccctg tctcaaaaaa aaaaaaaaaa aaa                     1003


<210> 831
<211> 1901
<212> DNA
<213> Homo sapiens

<400> 831
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gttgagtttc ttctaaagag gaagccttgc ccagcaagga ccagtgagac agccggatct    180
tggagacaat tacaagacgg ggagtgagac tcctgattgc tctggaagcc tgctgatttc    240
tacaactgat catttgcagc tgctggtttt ggtttccacc ttaccctact ggctgtaaaa    300
acacaaatgt gtactttatt gattttcttt ctaattctcc cgcattggtg gcttgggact    360
tgggagaggg agcaagcctt cctccatggc ccatcactcg gctgtggaga acaaagacca    420
atgtgaagac actacagagg attctgtctt ccaggcccag tccactgggg agtgctggaa    480
tggggacctg gggtgggggag gcagagggtc actttacata ggattaagtt cgaggtggct    540
accgatttca gcacatgcac tactgaaatt tacacaaaaa gaaagctgtg aaattgaagt    600
cccaatttaa gagtcctgag gcagaacctg gtggctggag gcattcccag aggtggggaa    660
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492

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gagagcctgc ccggccggag aacatctgcc ttgctgcacc tgaggcccag cagagccgtt    720
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ttcacacagc acctcctctc tgctgggttt ccacacagcc tgtcttcaga tcctgctgcc    840
gcgtgcgacc agaggtggga ggcccctggt ggcatggaag agggagggtc agtgccaagt    900
ctcaggagga gggcgcatgt gtgtatcacc ctcagctggc ggaacctggc tgcgaactgt    960
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aactctctag ttccctcagt gtgaagcctg tcgtgttctc tccccttgca ctggtcatca   1140
gtattgtgta aaggaacaac tgatatactt gagtgtgcaa gcaaagaacc catttgccat   1200
gctgctatga agactacttt tagatcaaca ataaaaaaaa acctacaaaa aaacctttat   1260
tctttaattg ttgcttttac ggtgatattg tgcatgcaaa ccaggagcat tttgtgtctt   1320
aagaaaaata atcttagaac agatggctgt gaaaattaca cccatgcaca gaacaagcca   1380
caggaataat agttcaggat ttggtttttc tcttttttct gtaaacctgg agggttgata   1440
tattctttcc atgcagttat tagaacttag ttttgttcca acagttaaac ttgcaatgaa   1500
aagaaaatgt gccatttttt tcactcagaa ttattcatag ctgtatattt gaaactgcta   1560
attacacacg tgtgatgtat gttggttttt tagtgcaatt tcttctgtag ctattctttg   1620
accaaactgt gggtattgtt aatattaatt tatatttgtc tcattttgta tgtatgtgta   1680
gtgtgtttgt gagtatgtgt ggtttataat ctgacaaagt catgaagctc agtttggctg   1740
taatttaatt ccccttccct tatttttatt tatttttgta ctgtgctgat tcaataaaat   1800
gcactgacca tccaaaaaaa aaacacaaca aaaacaaaag cagaaatact atatgtctac   1860
attttaaaat cagaattagt atatatactt acacacatac t                       1901


<210> 832
<211> 1901
<212> DNA
<213> Homo sapiens


<400> 832
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gttgagtttc ttctaaagag gaagccttgc ccagcaagga ccagtgagac agccggatct    180
tggagacaat tacaagacgg ggagtgagac tcctgattgc tctggaagcc tgctgatttc    240
tacaactgat catttgcagc tgctggtttt ggtttccacc ttaccctact ggctgtaaaa    300
acacaaatgt gtactttatt gattttcttt ctaattctcc cgcattggtg gcttgggact    360
tgggagaggg agcaagcctt cctccatggc ccatcactcg gctgtggaga acaaagacca    420
atgtgaagac actacagagg attctgtctt ccaggcccag tccactgggg agtgctggaa    480
tggggacctg gggtggggag gcagagggtc actttacata ggattaagtt cgaggtggct    540
accgatttca gcacatgcac tactgaaatt tacacaaaaa gaaagctgtg aaattgaagt    600
cccaatttaa gagtcctgag gcagaacctg gtggctggag gcattcccag aggtgggga    660
gagagcctgc ccggccggag aacatctgcc ttgctgcacc tgaggcccag cagagccgtt    720
cctgggactg tcagataatc ggtgcagcgg tggaaggagc ctgcggctgc tggcacagac    780
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ctcaggagga gggcgcatgt gtgtatcacc ctcagctggc ggaacctggc tgcgaactgt    960
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aactctctag ttccctcagt gtgaagcctg tcgtgttctc tccccttgca ctggtcatca   1140
gtattgtgta aaggaacaac tgatatactt gagtgtgcaa gcaaagaacc catttgccat   1200
gctgctatga agactacttt tagatcaaca ataaaaaaaa acctacaaaa aaacctttat   1260
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aagaaaatgt gccatttttt tcactcagaa ttattcatag ctgtatattt gaaactgcta   1560
attacacacg tgtgatgtat gttggttttt tagtgcaatt tcttctgtag ctattctttg   1620
accaaactgt gggtattgtt aatattaatt tatatttgtc tcattttgta tgtatgtgta   1680
gtgtgtttgt gagtatgtgt ggtttataat ctgacaaagt catgaagctc agtttggctg   1740
taatttaatt ccccttccct tatttttatt tatttttgta ctgtgctgat tcaataaaat   1800
gcactgacca tccaaaaaaa aaacacaaca aaaacaaaag cagaaatact atatgtctac   1860
attttaaaat cagaattagt atatatactt acacacatac t                       1901
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493

<210> 833
<211> 1901
<212> DNA
<213> Homo sapiens

<400> 833
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gttgagtttc ttctaaagag gaagccttgc ccagcaagga ccagtgagac agccggatct   180
tggagacaat tacaagacgg ggagtgagac tcctgattgc tctggaagcc tgctgatttc   240
tacaactgat catttgcagc tgctggtttt ggtttccacc ttaccctact ggctgtaaaa   300
acacaaatgt gtactttatt gattttcttt ctaattctcc cgcattggtg gcttgggact   360
tgggagaggg agcaagcctt cctccatggc ccatcactcg gctgtggaga acaaagacca   420
atgtgaagac actacagagg attctgtctt ccaggcccag tccactgggg agtgctggaa   480
tggggacctg gggtggggag gcagagggtc actttacata ggattaagtt cgaggtggct   540
accgatttca gcacatgcac tactgaaatt tacacaaaaa gaaagctgtg aaattgaagt   600
cccaatttaa gagtcctgag gcagaacctg gtggctggag gcattcccag aggtggggaa   660
gagagcctgc ccggccggag aacatctgcc ttgctgcacc tgaggcccag cagagccgtt   720
cctgggactg tcagataatc ggtgcagcgg tggaaggagc ctgcggctgc tggcacagac   780
ttcacacagc acctcctctc tgctgggttt ccacacagcc tgtcttcaga tcctgctgcc   840
gcgtgcgacc agaggtggga ggcccctggt ggcatggaag agggagggtc agtgccaagt   900
ctcaggagga gggcgcatgt gtgtatcacc ctcagctggc ggaacctggc tgcgaactgt   960
gcagttacgt tgcatccaca ggattccagt tgygtgtctg tttccttctc tttctccgta  1020
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aactctctag ttccctcagt gtgaagcctg tcgtgttctc tccccttgca ctggtcatca  1140
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gctgctatga agactacttt tagatcaaca ataaaaaaaa acctacaaaa aaacctttat  1260
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aagaaaatgt gccatttttt tcactcagaa ttattcatag ctgtatattt gaaactgcta  1560
attacacacg tgtgatgtat gttggttttt tagtgcaatt tcttctgtag ctattctttg  1620
accaaactgt gggtattgtt aatattaatt tatatttgtc tcattttgta tgtatgtgta  1680
gtgtgtttgt gagtatgtgt ggtttataat ctgacaaagt catgaagctc agtttggctg  1740
taatttaatt cccttccct tatttttatt tattttgta ctgtgctgat tcaataaaat  1800
gcactgacca tccaaaaaaa aaacacaaca aaaacaaaag cagaaatact atatgtctac  1860
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<210> 834
<211> 1177
<212> DNA
<213> Homo sapiens

<400> 834
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taccaaacac cagtggatca aaatatttaa acatgcagtt gctgggtgta ttatttcact   180
cttgtggttt tttggcctca ctctttgtgg accactaagg taaataaaaa tgcatatttt   240
gaatgtgtgt ttgtatttct tcattttgaa tattattttt gttccactgt gttttacgtc   300
aaatatttat ctgtacaaat gtgtctagca cttttatagc atcagagaga attcaacaga   360
tagaacaaac ctgtttagtt tctggactag ttctttagtg aataccatta atatatttat   420
tcatgatttg tcatagatat tttactagtt agaattccaa gtttcagaaa attttagca   480
taaacggctt tttaatcatt tattcatgat ccctgttaac agcttagaag ctataataaa   540
aggtctgaag tggtaaataa aattagccaa taagaaggag aacaaaaatc tctaaaagca   600
ctcattttt gcacaatttt gcaaatactc tcataaataa atgtctcaga agtagtatat   660
caattatcag attaaatgcg tggtggataa agtaaactac tcccatttca tatttcccta   720
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ctgtaaagga tttttactag tgaataagtg taagaaaaaa tgccttgccg tgagaatgag   900
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agcactttgg gaggccaagg ggtggatcat ttgaagttac gagttggaga ccaccctagc    1020
caacatagca aaaccccgcc tttattaaaa aatatacaaa aattagccag aaatcacttg    1080
aactcaggag gcgaaggttg cagtgagccg agatcacgcc actgcactgc aggctgggca    1140
acagagcgag atccgtctca aaaaaaaaaa aaaaaaa                             1177
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<210> 835
<211> 1731
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1657)
<223> n equals a,t,g, or c

<400> 835
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ctcccaacac tctgaggggtg gtgaacgatt gccacccgtt tgattttaat gtgctgctgc    180
atgagactgc attgttgcta atggccagtg tacccagatg tgaagtgtgg taggctggtt     240
catatgtgga ggtgggtgtg tgaagctaga cacgaaggtc cctaaggttc tgaagagact     300
tgaactgtgg aaatgctctt agcaggcatc ccgaacccct gcttcggtgc tgttttgagg     360
agtaggatct tggagttcag accaactatg actatcattt ccttcactat ctagaaaaac     420
gctattctac tttggaagag aatagtagtt attttcaagt ctcctgacag tcactgggag     480
tacaaggttt gctaatgtgc tctctggacg ttattaatgg ccagtattag ttgctgctgt     540
attactgact cgcttagctg tagaaagggg aatactctcc tgattttgta tgattggact     600
cttaagtagc tgctgttagt cagaattaaa acccatctca gactaagaat ataatgaata     660
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ataaaacaca tttcccccat ctgtacaata aatacagctt caaattcagt ggagtctgta     780
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<210> 836
<211> 1098
<212> DNA
<213> Homo sapiens

<400> 836
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gcagcggtgg aagctgcagg tgcaggagca gcggaacaca gtcttcgatc ggcacaagat    180
gctcagctag atgggctggt gtggttgggt caaggcccca acaccatggc tgccagcttc    240
caggctggac aaagcagggg gctacttctc ccttccctcg gttccagtct tcccttttaaa    300
agcctgtggc attttttcctc cttctcccta actttagaaa tgttgtactt ggctattttg    360
attagggaag agggatgtgg tctctgatct ctgttgtctt cttgggtctt tggggttgaa    420
gggaggggga aggcaggcca gaagggaatg gagacattcg aggcggcctc aggagtggat    480
gcgatctgtc tctcctggct ccactcttgc cgccttccag ctctgagtct tgggaatgtt    540
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gttacccttg gaagataaag ctgggtcttc aggaactcag tgtctgggag gaaagcatgg      600
cccagcattc agcatgtgtt cctttctgca gtggttctta tcaccacctc ccttccagcc      660
ccagcgcctc agccccagcc ccagctccag ccctgaggac agctctgatg ggagagctgg      720
gcccctgag  cccactgggt cttcagggtg cactggaagc tggtgttcgc tgtcccctgt      780
gcacttctcg cactggggca tggagtgccc atgcatactc tgctgccggt cccctcacct      840
gcacttgagg ggtctgggca gtccctcctc tccccagtgt ccacagtcac tgagccagac      900
ggtcggttgg aacatgagac tcgaggctga gcgtggatct gaacaccaca gcccctgtac      960
ttgggttgcc tcttgtccct gaacttcgtt gtaccagtgc atggagagaa aattttgtcc     1020
tcttgtctta gagttgtgtg taaatcaagg aagccatcat taaattgttt tatttctctc     1080
aaaaaaaaaa aaaaaaaa                                                    1098


<210> 837
<211> 1122
<212> DNA
<213> Homo sapiens

<400> 837
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tgcggactct caaccagctg ccaagccagc ccttcactgg ccccttcatg gctgtgctct      120
ttgccaaact cgagaacatg ctgcagaact ccgtctatgt caacttcctg ctgacggggc      180
tggtggccca gctggcctgt caccccagc  ccctgctccg ctctttcctg ctcaacacca      240
acatggtctt ccagcccagt gtcaagtccc tgctgcaggt gctgggctct gtgaagaata      300
agattgagaa ctttgcggct tcccaggagg acttcccagc actgctgtcc aaagccaaga      360·
agtacctcat tgcccgtggc aagttggact gggctgaggg ccctgcagca ggacctgccc      420
cacgccgttc tgatccccta gaaccctaaa ggagaagtcc aagaacctag ggggttgggg      480
gaatctcccc tctcacgtcc aatggaggtt ccctgatccc agcaccttca tgataccct       540
gtttattccc agtagaagac cggaagccat ccttggggga gttactcctg cggcatgcac      600
acagtccaac cagggcccgg caggcggcac aattggtcct tcagcctggg cgagacggag      660
caggacttgg cctaagtggg ggctcccctg gggcttcaac tccagttcta ctcacccggg      720
gcggggcccc tgaacgccaa ggtgaggctc ttcgagtcaa gaatgctgtc tactgtgcag      780
tcattttccc tgaatttctc aaggagttgg ctgccatctc ccaggctcat gccgtcacct      840
cgcctttctt gttggagact tcaaggaagg atctggccct ctcatctcag gctgtgggcc      900
cctcaatcct taactttctt ccatggacaa tcagggccat gggtggcccg ggctggggct      960
agggcacagg ctcctttta  tgtttggagg cagtggcaaa aggacttttt aatttatttc     1020
agatgaatgt tttatggaga acttgttgca atatgtataa aagggaaatc tctaaaaaaa     1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa                        1122


<210> 838
<211> 829
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (45)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (826)
<223> n equals a,t,g, or c
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<400> 838
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ttccccgcsc gttggccsga ttcattaatg cagctggcac gacaggtttc ccgactggaa   120
agcgggcagt gagcgaacgc aattaatgkg agtagctcac tcattaggca ccccaggctt   180
tacactttat gcttccggct cgtatgttgt gtggaattgt gagcggataa caatttcaca   240
caggaaacag ctatgaccat gattacgcca agcgcgcaat taaccctcac taaagggaac   300
aaaagctgga gctccaccgc ggtggcggcc gctctagaac tagtggatcc cccgggctgc   360
aggatatcta ctttggagaa ggagataata taattgaaag gagctagagg aatgtataat   420
gtttaccatt aacactatcc tttatttaca gccccatggg ggaaattccc tttataccca   480
ggagccatgt cttaccaggt aagaagccag attgaactgg agggacattc ttccagtcct   540
cttagtaaca taaactcctg ggatgtggtc caagtttgac ctgtcattaa aaattccata   600
ctccagtggg ttagaagcta gattccaatg aaggcggttg gttttgtttt tctatttaca   660
accattctta gtcacattct tctctgggct tttgttgtat actttaaaaa aactgtttga   720
tgtgcaattt gttacctgta actttctaaa tgaataaaag aagattgaaa aaataaaaaa   780
aaaaaaaaaa aaaaaaaaac tcggggggggg cccggtaccc aattcnccc               829
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<210> 839
<211> 1227
<212> DNA
<213> Homo sapiens

<400> 839
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ccgggcgggg gccgcggaag ctgcgatgcg gacagggcag cggcggtgac ccgagctgcc    60
gcccgacatg aactcgctgg agcaggcgga agatctcaag gcttttgaga ggagacttac   120
tgaatatatt cattgtttgc aacctgctac tggacgctgg agaatgcttc ttatagtggt   180
atctgtctgt acagctactg gtgcctggaa ctggttaata gaccctgaga cacaaaaggt   240
gtccttcttc acatcattat ggaatcaccc atttttcacc attagctgta tcactctaat   300
aggcttgttc tttgctggaa tacacaagag agtagttgca ccatcaatta tagctgctcg   360
atgtcgaacg gtattagcag aatacaatat gtcttgtgat gatacaggaa aactaatttt   420
gaaacctagg cctcatgttc aatgacaatc ttcactcatt gttatgggac ttaaaatagc   480
ctttcttcga ataagtgata cagcaaaaag ccataaagga ttcctttttgc ggttggatat   540
gtaaaggtca tagcagcaac tgacaagaag tgtgcaatat ttacctggat tatcttgatg   600
atggtgactc attatcagtg ctttggtact tttgattacc tgtgtttcag tattagtgtc   660
actttagtac ttcagatcct gcaaatattt ttgcagatga agtatgtatg tatgttacta   720
agttaaactt agaaacagaa cctcattcag tttttataat gtattttgc aaactactgt   780
aaatagcaaa tcaatgccaa tgttaaacaa agaggaaaac gttgtgtgga ctttgttctc   840
ttgcaccggt atttcaggaa catctgcttg ccatccccac agctctttaa aactggctta   900
ttatgtgtgc ctttcattct tacatttcta atcatactgc aggaaaaaca ttggattcag   960
cttagactga ggaaaactct ccattatgtt gtaagaaatt atagatgttt tgagagacac  1020
tttttgttaa accagatatt gaactccagc aactattgtg gttatatttt tagttcattg  1080
ttctcattta atgctaaata tcctttatat tgctttaata attttctttt ttttttttt   1140
tttttagac ggagtctcgc tctgttgcca ggctggaggg cagtggcaac agagcgagac  1200
tccgtctaaa aaaaaaaaaa aaaaaaa                                       1227
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<210> 840
<211> 1513
<212> DNA
<213> Homo sapiens

<400> 840
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ggcacgagct tcgacattac caagttccgt tccaacaagc aataccgcat ctgtctcaaa    60
accctcaagg aagagtttca gcaggacatg tcccgccgct acggctttgc tgccctgaaa   120
tatctcacag ccgagaacaa cagctagcac caagaagccc accactaggg ggagacatgc   180
tgtaggggaa gtgccactcg ctgtttgggg cccggccttc aaattcaaaa ttgagccatg   240
ctttttcggt ttgtttttat ttatctcttt ggcccagcca agctgccctc actacagaga   300
ccttggacaa ggatccagcc agtccctctt tgccccacaa ccctgcattc ccagaggtta   360
gctatgcagc ccacctagat gagtctcttc aagaatggga aatcaagggg tgacagggag   420
taaaagggtt atcatcttac tgcaaagcca caagatcagg gcagggcttt aggatgttct   480
ggatgctttt taataattat gcttcccatc ataactgggg agaaagggaa gtcagggttc   540
tagggggttat tcgtcccagg aaatagaagt gaaattgtct ttattaagtg aaaactttcc   600
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497

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cctttgccct gcaatgtagc tgggcattca aacggagggc aaaccgatga tctaaaccaa      660
ccacttggaa aaacccaatg gggacattgt aaccagaggg tcctggaggt ggggttgatg      720
ggtttcctta tccccaaagt cactcctgtt ttgttttgtt tttctttggg ggttttgttt      780
attttggggg ctggcaatcc aaaataaaaa tctgatcctt tgaggctcta aaggaaaatc      840
agctgcctct accaaccacc ctctatcaac agtggcccag gaaggaggtc aagcatcttc      900
ggccgatatt taaacatggg cagcttcctt caggatgatc accgaggctc ccgtgacttt      960
gaactcccta ctctccagaa tccaggggct atagcgatgg ggactgcgga attacgaggg     1020
ctggctgttt tacaccggtc acattttcta ttggcagtga ctgattcatg ggaaagggct     1080
ttgaaggaaa ctacttcagg tgcacacaca aggtacgaac ctctcaggcc tttcgaagaa     1140
ctttcataat tcatgaaagc ccagttctga agatttcacg tatccatctg gagacctaca     1200
ggaagaaagt gattgggttc ctctggttct ttgcctgctt cactgtggat gggaagaggt     1260
gacaacctca gtctcccttt gggacctgtc caagggtagg caaccacctt caccttcaca     1320
cagattgagg agacactgga ctttttaccc attttcttta atcttcaata ttaatattgt     1380
gtttacattg atgagaacaa gagttaatgc cctaccctct gctgggctgt ttgtattgag     1440
ttgcaatgtg accagcgaaa gctgcattta ataaatgaaa gtacagactg ttaaaaaaaa     1500
aaaaaaaaaa aaa                                                       1513
```

<210> 841
<211> 650
<212> DNA
<213> Homo sapiens

<400> 841
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cggcacgagt ccaccagggc tggaaaggtt acttcaaaat gaatgtggcc aggcagaata       60
atgacagtga ctgtggtgct tttgtgttgc agtactgcaa gcatctggcc ctgtctcagc      120
cattcagctt cacccagcag gacatgccca aacttcgtcg gcagatctac aaggagctgt      180
gtcactgcaa actcactgtg tgagcctcgt accccagacc ccaagcccat aaatgggaag      240
ggagacatgg gagtcccttc ccaagaaact ccagttcctt tcctctcttg cctcttccca      300
ctcacttccc tttggttttt catatttaaa tgtttcaatt tctgtatttt tttttctttg      360
agagaatact tgttgatttc tgatgtgcag ggggtggcta cagaaaagcc cctttcttcc      420
tctgtttgca ggggagtgtg gccctgtggc ctgggtggag cagtcatcct cccccttccc      480
cgtgcaggga gcaggaaatc agtgctgggg gtggtgggcg gacaatagga tcactgcctg      540
ccagatcttc aaactttata tatatatata tatatatata tatataaatg ccacggtcct      600
gctctggtca ataaaggatc ctttgttgat aaaaaaaaaa aaaaaaaaaa                 650
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<210> 842
<211> 3652
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (306)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1412)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1519)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2101)
<223> n equals a,t,g, or c

<220>

<221> SITE
<222> (2102)
<223> n equals a,t,g, or c

<400> 842
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acgagctgat gtctcccgga ggaatctgca attgcataat ttagttggtt gcttgtctac     60
tgtctctctc tttggcaaga atgaaagctc tatgagcaaa cagaccttgt ctgccttatg    120
atccatttta ttactagagc ctaggactgt taaattcatt aataaagtct ttccatcact    180
ttttgttctt tatattcctt tactcaattg atattcagca tgtgcagaac agttcttttc    240
caaggctgca taaaagtttt ggaatgaggc acataaataa tatccttcta ccaataaatg    300
ctatcngtta taaaatagtt tttattttat aatcactgaa tatgtcaaaa ctttacagtt    360
caggcctttt gaatcaaatg caaaatcaaa tatgaaaagg ttaatgatct tgtccactaa    420
aattgtagtt tgccatacag gaaaatagac tcttaaaaat gataaaaaaa aaaaaatcat    480
tcttaaggaa acatattaat aagacattta aaaaggctaa gatctttaat gtgaaaaata    540
ataagataaa gatgacaacc actgaagaga agaaaaaacg ttttatgttt tttctaaatg    600
tgtgtaaaaa caaaatcttg tacctaccaa aatgacactt ttttcaaaga aaggtatcaa    660
atgtgtatac tttaacacac agcccttcct tgtgtaaata tataggaaat ccttaaagga    720
gcataaaaca atttacttag aaattctata cttaaactta ttcaaaggaa ataattaaag    780
gtgtgtaaat aagatatgca tagcattgct ctaaatgtca aatagtaggg aactaggtaa    840
ataagatata tctatttagg gaattagtca agtaagatat acctatttag ctaattccat    900
gtagccatca aaaggatacc atagaacaga acttattgat gtgaaaagat gattaaaatg    960
tacttgttac taaaaacagc aggctgcaat actgtattaa ataatgagcc catgctgtat   1020
atctagacaa acatatatca taatgataat aataaatgta tgagacttat atttttgctt   1080
ctctgtattt tctaatttgt ctgtgataaa caaatattat taatgtaatg aagaataagc   1140
taaaatatac aaaaacaata acaactataa aaagaacccc ttcaatcaaa aagagatcat   1200
cagggattta attcaactat ggattggcac tattaggagg ccaaatatga ttcgttgaac   1260
tgaactgtag taaagacaag atattaggaa aatgtttaaa ttatgtgaga actattctca   1320
agcactttaa agatctattt gcaagataac aatgtgctaa ctttaagtaa tgtctatgta   1380
ttcttgagac cagctttgac aatgacagct gncattccat ttgacttgga cttacattat   1440
gttttgtcta tattttcaaa aacagaaccc agggactgat tcttacaagc attttcttaa   1500
agattcactg ggtggctgna aatctgatca agctgttctt tgggagatca ttattcaaca   1560
cttatcacat actttatttc tacagctatg actgtcactc cccaagcttc acttcataat   1620
gaaaataaag aatacagccc ttttggaaaa gttggatggt aataccaagt gcgtaagttt   1680
ttagtacatg ccatatcaca accttctacg tggctgactt ttgacttttt catttctttt   1740
ataactgaca gaagacacaa aggcaaaaat gtcaacttca caaaaaatct tagtgctttt   1800
tggaaagaat gttatagatc atccagtcta accccctgat gttataaata tggaaattta   1860
ggcctagaaa ataggtaagt gatgaatcaa actagaagca ggtgtcctgc ctctaagccc   1920
aatccagttg ccatcatcat ttactattta catggaacat caggttctac tttagaagtt   1980
aactatcaac ctacagggtt aaggaaaata gcaatgtgta tatacagacc ttgcatctgg   2040
tagctgtatg gtgcctgtcc aggttgaggg gtactgaagc ttgtgccata gctgagaaat   2100
nntgtctgtc caggtgactg agactgtgac aatccacctt cagtcttgat gcctgcccac   2160
aatgcaccta aatcagttag tgatagctta tctatctgtc cattttcaaa agctggtaaa   2220
tatacaaaaa catacacttc cacaaccgtt taactacaaa tgcttcccca atcttatctc   2280
aaaaataaag ggtatacatg cattcagtga aataccataa agtacaactt cagttttta   2340
aatccaggat tacagatttg aatgtctatt cacattattc tctcttgttt tattgcactt   2400
caagacatat cccttctata aaatgtaact ccagtgatat attttcatac ttaatttgt   2460
tgttttaatt atgtaagagt tgaagatcat ctccttcaca gtaaagaaat agccataatt   2520
aaattttagc taaatgttcc caaagttgct atattgacta gtgttaaaaa taaaatcctt   2580
ttttatatta aaaatattaa ttagatccta taccatcaca gtatttttcc ctcctttact   2640
ctttctacta caaagctgat ttcagtacca actcattttg aagtccaaag aagcaatact   2700
gggcacagaa ctaaacaaca tggtggaaag gcttttcctg aatatctagg tcctatcaga   2760
aaataagcac aaaggaagca gaacactaat gagctgaatc ttataaaaca gcagtgattt   2820
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tataattgtt ttcgatgtag tctaaagtac ctttgttttt atcatatgat aatataaaaa   2940
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acttggattt ggcagcactg aggtatgggg ctcagctctg tctttaatta attacaatta   3060
aagacagtca tacatgttaa caactctcct tcattctcac agagggaggg aagaaaaatt   3120
tctgccgagg gaattcacat tttttaataa ttttgcttcg tacttaagat aaatgatatc   3180
tttaggatct agaatacaca gtagtcttac tgtttatttc cattttaggg gaatctcatc   3240
agcagagtac agctaggtaa ttgtttttaag gcagtgggag aatctgactc ttggctgaga   3300
gtgcctactt taattcctgc agtatctcta aataacttca taatgacctt aacatttaag   3360
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499

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tcttaacaca accttaacat tttaaaaatg tgattttccc tgtaaaggtg atcccaaacc    3420
aatgaataac ccacacatag aaatggtccc tggaaataca cctgccccag acaggtggca    3480
tgatggcttt agaaaatccc tttctttcca tgttgtcacc cctagggatt ttccacctct    3540
tgctgcattt gagactatac tgatctgctt ccagccttca cctataccaa taaaatacca    3600
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<210> 843
<211> 814
<212> DNA
<213> Homo sapiens

<400> 843
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gccgcgggcg agccgctgca gagggagcgt cgcgccgggg cggagtgcgg gcttgcgcgg     120
caagtgcgcg ccgaggtcac gaaatggatt ggagtgaacc ggagaccccg aaaacggaag     180
cgcagggaga aggaagaggt gtttgcagag gttcgccatc ggtggtgtga actcattgtt     240
aagcacaagt tcacgaaagc ctacaaaagt gtggagaggt tccttcagga ggatcaggaa     300
agaccacagc aagattcttt cattcgtctc ctcctagcct gggggaccag gctcgaactg     360
accctggaca tcaaaggagg gattatgtgg ctgctaaagc catcggccca cagccctgtt     420
cacgtcttgg tgcttctctt tcccagaggc tggtcccagc caggcacaca caaaaggcag     480
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caggatgaga atctaagata tattattaat aaatgtaatg gatttttttt ttgtaaaaaa     780
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa                                 814


<210> 844
<211> 1059
<212> DNA
<213> Homo sapiens

<400> 844
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tggtgccaat accctcatcc cttccaccag ccagcttcca gaagaggcct tgctgggaaa     120
caggctggac agccacgact gggttttcct ccctggcctg ctctggggag tggttctttta    180
ctgtggcctc acagcctctg gcctcctcac tgggcaccag tcaggatatc tgcctacggc     240
tgtgtctctg tgccaggcac aggctgggag ctggggcact gaggctccgg aggctgtggc     300
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aggcagggag gtgagggagg ctcggaatct ctgctgagct cacactcctt gccctgtaat     480
gtgcaagaac ctgccccgcc ccgcagccct cgtgccccag cccttctgcc tctgctctgc     540
tttgcaggct cgagtacttg caccagaagc agacaaagtc tccagtgagc tggagaggca     600
agccctggag aagcagggca gggaagccga gaaggagatc cacccgtgtg tctggaaggg     660
actgcgggac cattccttcc atcctcttta tttcctgagg tccagagaag gaaggagact     720
tagcagccac agagcaagac cccaatctcc tgactgcact ggcctgactg ccccctccca     780
ggggatgtta atgaaatgaa ggaagtgggc cctttgagtc aggaaaccag ggccagttct     840
ttttcaggag ttaaatgttt acccatttcc aaggttgcgt tttgggaggg gacatggttt    900
ctctccttcc tgctatttag gcattctcca ggttcgagag ccactgcatt ttgtttaaac    960
acagatagca cgggcctttc tcttattgct acagtgtttt gtacacggtt aaaacactag    1020
taaagctttt tcgttattaa aaaaaaaaaa aaaaaaaa                            1059


<210> 845
<211> 968
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (928)
<223> n equals a,t,g, or c
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